STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 2001.4.A05—2004
Methods of test for textiles
Method 4.A05: Colourfastness tests—Instrumental assessment of the change in colour for determination of grey scale rating

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

AS 2001.4.A05—2004
ISO 105-A05:1996
Reconfirmed 2016

Australian Standard™

Methods of test for textiles

Method 4.A05: Colourfastness tests—Instrumental assessment of the change in colour for determination of grey scale rating

PREFACE

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

The objective of this Standard is to provide manufacturers and testing bodies with a basic Standard method for determining the resistance of colour of textiles to treatments such as chemical, mechanical or natural and a way of determining the amount of change in colour for grey scale rating.

This Standard is identical with and has been reproduced from ISO 105-A05:1996, *Textiles—Tests for colour fastness*—Part A05: *Instrumental assessment of change in colour for determination of grey scale rating.*

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.

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 F series. Appendix B was identical to ISO 105-A04, and Appendix C is identical to ISO 105-A05. Committee TX-020 is currently in the process of adopting these International Standards. When this is done, AS 2001.4.1—1996 will be withdrawn.

The normative references listed in Clause 2 have not been adopted as Australian Standards.

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1 Scope

This part of ISO 105 specifies an instrumental method for assessing the change in colour of a test specimen in comparison to an identical untreated reference, and the calculations undertaken to convert the instrumental measurements into a grey scale rating.

This method is intended as an alternative to the many national methods for visual evaluation of the effect of a colour fastness test on any textile material.

NOTE 1 There may be a difference between instrumental and visual assessments of specimens due to fluorescence, and/or other factors.

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-J03:1995, *Textiles — Tests for colour fastness — Part J03: Calculation of colour differences.*

CIE Publication No. 5.2, *Colorimetry,* 2nd ed., 1986.[1)]

3 Principle

The colour of the specimen which has been subjected to the colour fastness test and the colour of an identical untreated specimen are measured instrumentally. The CIELAB coordinates for lightness L^*, chroma C^*_{ab} and hue h_{ab} are determined for both specimens, and the CIELAB differences ΔL^*, ΔC^*_{ab} and ΔH^*_{ab} are calculated and converted to a grey scale rating by means of a series of equations.

1) Available from the CIE Central Bureau, Kegelgasse 27, A-1030 Vienna, Austria.