STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 2001.4.E04—2005
Methods of test for textiles
Method 4.E04: Colourfastness tests—Determination of colourfastness to perspiration

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.E04—2005
ISO 105-E04:1994
Reconfirmed 2016

Australian Standard™

Methods of test for textiles

Method 4.E04: Colourfastness tests— Determination of colourfastness to perspiration

PREFACE

This Standard was prepared by the Standards Australia Committee TX-020, Testing of Textiles to supersede AS 2001.4.17:1980, *Methods of test for textiles*, Method 4.17: *Colourfastness tests—Determination of colourfastness to perspiration,* which will remain available superseded.

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 perspiration.

This Standard is identical with and has been reproduced from ISO 105-E04:1994, *Textiles—Tests for colour fastness*, Part E04: *Colour fastness to perspiration* and its corrigendum 1:2002 which is added after the main source text.

The major difference between this Standard and the 1980 edition is that there is no longer a dish method for determining colourfastness. If testing by this method, reference should be made to AS 2001.4.17—1980. The Committee decided that the smaller specimen size for the dish method would require different apparatus, and to change the method to this extent meant it was, in effect, a new method.

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 references to International Standard should be replaced by references to the following Australian Standards as follows:

Reference to International Standards		*Australian Standard*	
ISO		AS	
105	Textiles—Tests for colour fastness	2001	Methods of test for textiles
105-A01	Part A01: General principles of testing	2001.4.A01	Method A01: Colourfastness tests—Definitions and general requirements
105-A02	Part A02: Grey scale for assessing change in colour	2001.4.A02	Method A02: Colourfastness tests—Grey scale for assessing change in colour
105-A03	Part A03: Grey scale for assessing staining	2001.4.A03	Method A03: Colourfastness tests—Grey scale for assessing staining
105-F	Part F: Standard adjacent fabrics	—	
105-F10	Part F10: Specification for adjacent fabrics: Multifibre	—	

NOTES

1 Scope

This part of ISO 105 specifies a method for determining the resistance of the colour of textiles of all kinds and in all forms to the action of human perspiration.

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 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-F:1985, *Textiles — Tests for colour fastness — Part F: Standard adjacent fabrics.*

ISO 105-F10:1989, *Textiles — Tests for colour fastness — Part F10: Specification for adjacent fabric: Multifibre.*

3 Principle

Specimens of the textile in contact with adjacent fabrics are treated in two different solutions containing histidine, drained and placed between two plates under a specified pressure in a test device. The specimens and the adjacent fabrics are dried separately. The change in colour of each specimen and the staining of the adjacent fabrics are assessed by comparison with the grey scales.

4 Apparatus and reagents

4.1 Test devices, each consisting of a frame of stainless steel into which a weight-piece of mass approximately 5 kg and base of 60 mm × 115 mm is closely fitted, so that a pressure of 12,5 kPa can be applied on test specimens measuring 40 mm × 100 mm placed between glass or acrylic-resin plates measuring approximately 60 mm × 115 mm × 1,5 mm. The test device shall be constructed so that, if the weight-piece is removed during the test, the pressure of 12,5 kPa remains unchanged.

If the dimensions of the composite specimen differ from the size of 40 mm × 100 mm, the weight-piece used shall be such that a pressure of 12,5 kPa is applied to the specimen.

NOTE 1 Other devices may be used provided that equivalent results are obtained.

4.2 Oven without an air-circulating fan, maintained at 37 °C ± 2 °C.