

Australian Standard™

Methods of test for textiles

Method 4.E02: Colourfastness tests— Colourfastness to sea water

PREFACE

This Standard was prepared by the Standards Australia Committee TX-020, Testing of Textiles to supersede AS 2001.4.14—1980, *Methods of test for textiles, Part 4: Colourfastness tests—Determination of colourfastness to sea water*.

The objective of this Standard is to provide manufacturers and others with a suitable test method for determining the colourfastness of textiles to sea water.

This Standard is identical with and has been reproduced from ISO 105-E02:1994, *Textiles—Tests for colour fastness, Part E02: Colour fastness to sea water*.

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 2001.4.14—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 substitutes for a comma when referring to a decimal marker.

The Committee are currently in the process of adopting the International Standards referenced below. Currently AS 2001.4.1 is based on ISO 105-A01. Appendix A of 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.

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 or Australian/New Zealand 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-A03	Part A03: Grey scale for assessing staining	—	
105-F	Part F: Standard adjacent fabrics	—	
105-F10	Part F10: Specification for adjacent fabric: Multifibre	—	



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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 immersion in sea water.

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

A specimen of the textile in contact with one or two specified adjacent fabrics is immersed in sodium chloride solution, drained and placed between two plates under a specified pressure in a test device. The specimen and the adjacent fabric(s) are dried. The change in colour of the specimen and the staining of the adjacent fabric(s) are assessed by comparison with the grey scales.

4 Apparatus and reagent

4.1 Test device, 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 comparable results are obtained.

4.2 Oven, maintained at 37 °C ± 2 °C.

4.3 Sodium chloride, 30 g/l aqueous solution, prepared using grade 3 water (see ISO 105-A01:1994, subclause 8.1).