

## STANDARDS ASSOCIATION OF AUSTRALIA

## Australian Standard

## METHODS OF TEST FOR TEXTILES

## PART 4—COLOURFASTNESS TESTS

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**AS 2001.4.8**  
**DETERMINATION OF COLOURFASTNESS**  
**TO WATER**


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## PREFACE

This standard is one of a series for determining the colourfastness of textiles to various agencies. It is a revision of AS L15, Part VIII—1961, which it accordingly supersedes.

The series of methods are largely based on the work of a technical committee of the International Organization for Standardization (ISO/TC 38/SC 1) and are being adapted to suit Australian conditions.

This standard requires reference to the following Australian standards:

AS 2001.4.1 Methods of Test for Textiles Part 4—Colourfastness Tests, Method 1—Definitions and General Requirements\*

AS 2001.1.1 Methods of Test for Textiles—Conditioning Procedures†

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\* Revision of AS L15, Part 1 in course of preparation.

† Revision of AS 1090 in course of preparation.

## METHOD

**1 SCOPE.** This standard describes two alternative procedures for determining the colourfastness of textiles to warm water.

**2 APPLICATION.** This method applies to textiles in all forms.

**3 PRINCIPLE.** A test specimen in contact with undyed cloths is immersed in warm water containing a wetting agent for a stated time. The specimen may or may not then be rinsed depending on its end-use. After drying the change in colour of the specimen and the degree of staining of the undyed cloths are assessed.

NOTE: Staining onto the undyed cloths may be persistent or temporary in character, the significant factor being the end-use of the textile under test.

**4 REAGENT.** A test solution of distilled or deionized water containing 0.2 g/L of a non-ionic wetting agent. The wetting agent shall be a polyalkylene derivative of synthetic alcohol.\*

**5 APPARATUS.** Depending on the method selected, the following apparatus is required:

- (a) A perspiration tester as described in Appendix A.
- (b) Perspex plates approximately 100 mm × 60 mm × 6 mm.
- (c) Small flat-bottomed glass dish for each specimen. A petri dish, about 100 mm diameter is suitable.

(d) Oven to operate at  $40 \pm 2^\circ\text{C}$  throughout the chamber.

(e) Smooth glass plate for each specimen, large enough to cover the specimen and having a mass of  $50 \pm 5$  g.

(f) Two undyed cloths (see AS 2001.4.1) each 50 mm × 50 mm. One cloth shall have similar dyeing characteristics to the textile to be tested, or to the predominating fibre of a blended textile. The second cloth shall have dissimilar dyeing characteristics to those of the first piece.

(g) Grey scales for assessing change in colour and staining (see AS 2001.4.1).

**6 COMPOSITE SPECIMEN.**

**6.1 Fabric.** When testing fabric place a fabric specimen 50 mm × 50 mm between the two undyed cloths of the same size and sew along one side to form a composite test specimen.

**6.2 Yarn.** When testing yarn, either knit a specimen of the yarn into fabric and treat as in Clause 6.1 or form a layer of parallel lengths of yarn specimens between the two undyed cloths and sew along one side so as to keep the yarn in place and to form a composite test specimen.

NOTE: The sewing yarn† is to be undyed and free of optical brightening agents.

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\* Teric BL8 produced by ICI Australia Ltd is a suitable wetting agent.

† A suitable yarn is 'Supersheen' mercerized sewing cotton No. 36 Art No B979 'Half White' available from the Australian Wool Testing Authority, Material Supply Service, Melbourne.