

STANDARDS ASSOCIATION OF AUSTRALIA

**Australian Standard  
METHODS OF TEST FOR TEXTILES**

**PART 4—COLOURFASTNESS TESTS**

**AS 2001.4.15  
DETERMINATION OF COLOURFASTNESS  
TO WASHING**

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**PREFACE**

This standard was prepared by the Association's Committee on Testing of Textiles as one of a series for determining the colourfastness of textiles to various agencies. It supersedes AS L15, Part XV—1964.

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

Seven test procedures are described in this standard. Of these, procedures A, B, C, F and G are substantially similar to the procedures in the wash tests described in ISO 105, Textiles—Tests for Colour Fastness Group C: Colour Fastness to Washing and Laundering.

**METHOD**

**1 SCOPE.** This standard sets out methods for determining the colourfastness of textiles to washing.

Seven procedures are described, as follows:

- Test A—Colourfastness to Simulated Hand Laundering.
- Test B—Colourfastness to Mild Conditions of Machine Laundering.
- Test C—Colourfastness to Moderate Conditions of Machine Laundering.
- Test D—Colourfastness to Prolonged, Moderate Conditions of Machine Laundering.
- Test E—Colourfastness to Severe Conditions of Machine Laundering.
- Test F—Colourfastness to Very Severe Conditions of Machine Laundering.
- Test G—Colourfastness to Prolonged, Very Severe Conditions of Machine Laundering.

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

**3 REFERENCES.** This standard requires reference to the following Australian standards:

- AS 2001.1.1 Methods of Test for Textiles—Conditioning Procedures\*
- AS 2001.4.1 Methods of Test for Textiles Part 4—Colourfastness Tests Method 1—Definitions and General Requirements.

**4 PRINCIPLE.** A test specimen in contact with undyed cloths is agitated in a soap solution. The specimen and undyed cloths are rinsed and dried and the change in colour of the specimen and the degree of staining of the undyed cloths are assessed.

**5 REAGENTS.** The following two test solutions are required depending on the test method selected:

- (a) A solution of distilled or deionized water containing 5 g/L of standard soap.
- (b) A solution of distilled or deionized water containing 5 g/L of standard soap and 2 g/L of anhydrous sodium carbonate.

The standard soap† shall comply with the following requirements based, where appropriate, upon dry mass:

- Moisture content—no more than 5 percent
- Free alkali, calculated as Na<sub>2</sub>CO<sub>3</sub>—3 g/kg max.
- Free alkali, calculated as NaOH—1 g/kg max.
- Total fatty matter—850 g/kg min.
- Titre of mixed fatty acids prepared from soap—30°C max.
- Iodine value—50 max.
- The soap shall be free from fluorescent brightening agents.

\*Revision of AS 1090 in course of preparation.  
†Available from AWTA Materials Supply Service, 24 Robertson Street, Kensington, 3031.