

## STANDARDS ASSOCIATION OF AUSTRALIA

**Australian Standard**  
**METHODS OF TEST FOR TEXTILE FLOOR COVERINGS**

**AS 2111.19.2**  
**COLOURFASTNESS TESTS—SHAMPOO SOLUTION**

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 and textile products to various agencies.

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) which is being adapted to suit Australian conditions.

In the preparation of this standard, particular account was taken of BS 1006-UK-TB 1978.

METHOD

**1 SCOPE.** This standard sets out a method for determining the colourfastness of a textile floor covering to the action of a specified shampoo solution.

**2 APPLICATION.** This method applies to textile floor coverings and to yarns, loose fibres and tufts extracted from textile floor coverings.

**3 REFERENCED DOCUMENTS.** The following standards are referred to in this standard:

- AS 2001.1 Methods of Test for Textiles  
Part 1—Conditioning Procedures†
- AS 2001.4 Methods of Test for Textiles  
Part 4—Colourfastness Tests,  
Method 1—Definitions and General  
Requirements
- Part 4—Colourfastness Tests,  
Method 17—Determination of  
Colourfastness to Perspiration

**4 PRINCIPLE.** A specimen of the textile floor covering, yarn, loose fibre or tufts, in contact with specified undyed cloths is immersed under pressure in a test solution for a stated time. Following this treatment, the specimen is dried by holding it at 40°C for 1.5 h between two flat glass or acrylic surfaces under pressure, applied either by means of a spring loaded apparatus (Perspirometer Test Method A) or a dead-weight (Dish Test Method B). After drying, the change in colour of the specimen and the staining of the undyed cloths are assessed.

**5 REAGENTS.** The following reagents are required:

- (a) Shampoo solution, prepared by dissolving 1 g sodium dodecyl benzene sulphonate\* and 0.2 g lauric monoisopropanolamide\* in about 500 mL deionized or distilled water. Heat, if necessary, to ensure dissolution of the surfactant.

Cool to a temperature of about 30°C. Prepare a buffer solution by adding 14 mL 0.5 mol/L citric acid\* to 372 mL 0.5 mol/L disodium hydrogen phosphate\*. Add the buffer solution to the surfactant solution and make up to 1 L. If required, adjust the pH to  $7.5 \pm 0.2$  using citric acid or sodium hydroxide, as appropriate.

- (b) Distilled or deionized water.

**6 APPARATUS.** Depending on the technique selected for applying pressure to the specimen (see Clause 4), the following items of apparatus are required:

- (a) Perspirometer, as described in AS 2001.4.17, or equivalent apparatus\*\*.
- (b) Flat-bottomed dish.
- (c) Smooth glass or clear acrylic resin plates measuring 100 mm × 60 mm × 6 mm thick.
- (d) A weight-piece of mass approximately 5 kg which has base dimensions suitable for it to be placed on the plate (c).
- (e) pH meter.
- (f) Ventilated oven maintained at  $40 \pm 2^\circ\text{C}$ .
- (g) 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.
- (h) Sewing yarn (see AS 2001.4.1).
- (j) Grey scales for assessing change in colour and staining (see AS 2001.4.1).

†Revision of AS 1090 in course of preparation—see DR 81331.

\*Available from AWTA Materials Supply Service, 24 Robertson Street, Kensington, Victoria, 3031.

\*\*The Perspirometer developed by the American Association of Textile Chemists and Colourists is suitable for tests of this kind, but any apparatus giving identical results may be used.

