

STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 2001.5.3—1985

Methods of test for textiles

Part 5.3: Dimensional change—Determination of relaxation in aqueous solution

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

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
METHODS OF TEST FOR TEXTILES

PART 5—DIMENSIONAL CHANGE

AS 2001.5.3
DETERMINATION OF RELAXATION IN
AQUEOUS SOLUTION

PREFACE

This standard was prepared by the Association's Committee on Testing of Textiles as one of a series of methods for determining dimensional change through relaxation in a warm aqueous solution. It supersedes AS 1287, Part 3—1973.

In the preparation of this standard the Committee has recognized the need to incorporate an alternative means of removing excess liquor by hydroextraction in the dynamic test.

METHOD

1 SCOPE. This standard sets out two tests for determining dimensional change of fabrics or garments relaxed in a warm aqueous solution, viz. Test A—Static Relaxation, and Test B—Dynamic Relaxation.

2 APPLICATION. This method applies to textiles in fabric or garment form.

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

AS 2001.1 Methods of Test for Textiles—
Conditioning Procedures

AS 2001.5.1 Methods of Test for Textiles—
Dimensional Change—General
Requirements

4 PRINCIPLE. Specimen(s) of the fabric or garment under test are marked, measured, then immersed in warm aqueous solution in a dish (Test A) or in a Cubex apparatus (Test B), dried and the resultant dimensional changes are measured, calculated and reported.

5 REAGENTS. Neutral wash solution consisting of the following reagents per litre of solution:

Sodium dihydrogen phosphate, anhydrous (NaH ₂ PO ₄)	0.5 g
Disodium hydrogen phosphate, anhydrous (Na ₂ HPO ₄)	1.0 g
Non-ionic wetting agent of the ethylene oxide alkyl phenol condensate type (e.g. Lissapol TN or Penetrax)	0.5 g
Water to make	1 L

NOTES:

1. Adjust the pH of the solution to 7.0 ± 0.2 , if necessary.
2. Distilled water is not essential, but water of hardness greater than 100 mg/L (CaCO₃) must not be used.

6 APPARATUS. The following items of apparatus are required:

- (a) Shallow dish or tank not less than 400 mm square (Test A) with a means of maintaining the specified temperature.
- (b) Cubex International Shrinkage Testing Apparatus (Test B) as described in AS 2001.5.1.
- (c) Makeweights (see AS 2001.5.1).
- (d) Marking and measuring equipment (see AS 2001.5.1).
- (e) Balance capable of weighting test specimens to an accuracy of not less than 1 part in 100.
- (f) Hydroextractor.
- (g) Drying cabinet to operate at a temperature not exceeding 70°C.

7 TEST SPECIMENS. General principles described in AS 2001.5.1 shall be observed with the following qualifications:

Test A: A specimen measuring 300 mm × 300 mm.

Test B:

For Fabrics. Two test specimens each measuring 300 mm × 300 mm. Additional specimens may be included in the load provided that the total mass does not exceed 500 g.

For Garments. The mass of each garment or garment section shall not exceed 500 g.

NOTE: Where garments exceed the dimensional or mass requirements, cutting may be necessary.