

Australian Standard™

**Methods of test for single sided and
double sided pressure sensitive
adhesive tape**

**Method 1.4: Adhesion—Adhesion
strength after immersion**

STANDARDS
Australia



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Australian Paints Manufacturers Federation
Canmakers Institute of Australia
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PREFACE

This Standard was prepared by Standards Australia Committee PK-025, Packaging Code to supersede AS 1635.3.5—1995, *Methods of test for pressure-sensitive adhesive tape, Part 3.5: Adhesion strength after water immersion*.

The objective of this edition is to revise the apparatus and materials used in the procedure of the Standard.

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STANDARDS AUSTRALIA

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Methods of test for single sided and double sided pressure-sensitive adhesive tape

Method 1.4: Adhesion—Adhesion strength after immersion

1 SCOPE

This Standard specifies the method for determining the adhesion strength after water immersion, of pressure-sensitive adhesive tape.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1683 Methods of test for elastomers

1683.15.2 Method 15.2: Durometer hardness

2193 Calibration and classification of force-measuring systems

3 REAGENTS

The following reagents are required:

3.1 Isopropynol

Reagent grade.

NOTE: A substitute of isopropynol is acetone, reagent grade.

3.2 Distilled Water**4 APPARATUS AND MATERIALS**

The following apparatus and materials are required:

(a) *Tension testing machine*

Complying with the requirements of AS 2193 for Grade B machines over suitable load ranges, and having a moving jaw or carriage with a rate of travel of 300 ± 10 mm/min.

(b) *Stainless steel panel*

Approximately 50 mm wide, at least 125 mm long, and approximately 1.5 mm thick and finished in the lengthwise direction to a bright annealed finish with a surface finish of $0.04 \mu\text{m}$.

(c) *Steel roller (see Figure 1)*

Of diameter 80 ± 5 mm and width 45 ± 1 mm covered with rubber approximately 6 mm thick, and having a durometer hardness of 80 ± 5 Type A degrees (in accordance with AS 1683.15.2).

NOTE: The mass of the roller proper (which applies pressure to the specimen) should be 2.0 ± 0.1 kg. It should be so constructed that the mass of the handle is not added to the mass of the roller during use.