

Australian Standard™

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

Method 1.1: Adhesion—Peel adhesion

STANDARDS
Australia



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PREFACE

This Standard was prepared by the Standards Australia Committee PK-025, Packaging Code to supersede AS 1635.3.1—1993, *Methods of test for pressure-sensitive adhesive tape, Part 3.1: Adhesion strength*.

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

CONTENTS

	<i>Page</i>
1 SCOPE	3
2 REFERENCED DOCUMENTS.....	3
3 REAGENTS.....	3
4 APPARATUS AND MATERIALS.....	3
5 TEST CONDITIONS.....	4
6 PREPARATION OF TEST SPECIMENS.....	4
7 PROCEDURE.....	4
8 CALCULATION	5
9 TEST REPORT.....	5

STANDARDS AUSTRALIA

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

Method 1.1: Adhesion—Peel adhesion

1 SCOPE

This Standard specifies the method for determining the adhesion strength of pressure-sensitive adhesive tape to a stainless steel test panel.

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**3.1 Isopropynol**

Reagent grade is required.

NOTE: Acetone, reagent grade may also be used.

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 anneal 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.
- (d) *Fresh absorbent cleaning material*—these clean materials shall be lint free and contain no soluble additives, e.g. surgical gauze, untreated paper tissue.
- (e) *Specimen cutter*—consisting of a 25 mm thick \times 200 mm long \times 25 mm wide aluminium bar stock. The edges for about 125 mm from one end shall be rounded slightly to form a handle. The width of the bar for 75 mm from the opposite end shall be narrowed to exactly 25 mm minus the thickness of a single razor blade (one of two razor blades used as cutting edges).