

Australian Standard™

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

**Method 1.7: Adhesion—Resistance to
static shear load at elevated
temperature**

STANDARDS
Australia



This Australian Standard was prepared by Committee PK-025, Packaging Code. It was approved on behalf of the Council of Standards Australia on 8 September 2005.
This Standard was published on 28 October 2005.

The following are represented on Committee PK-025:

Australian Paints Manufacturers' Federation
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This Standard was issued in draft form for comment as DR 05174.

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Originally as AS Z24.10.1—1968.
Previous edition AS/NZS 1635.10.1:1995.
Revised and redesignated as AS 2313.1.7—2005.

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Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 6931 4

PREFACE

This Standard was prepared by the Standards Australia Committee PK-025, Packaging Code to supersede AS/NZS 1635.10.1:1995, *Methods of test for pressure-sensitive adhesive tape, Part 10.1: Resistance to static shear loading at elevated temperature*.

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 1.7: Adhesion—Resistance to static shear load at elevated temperature****1 SCOPE**

This Standard specifies the method for determining the ability of pressure-sensitive adhesive tape to resist shear loading at elevated temperatures.

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

3 REAGENTS**3.1 Isopropynol**

Reagent grade, is required.

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

4 APPARATUS AND MATERIALS

The following apparatus and materials are required:

(a) *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.

(b) *Two stainless steel panels*

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 which has a surface finish of $0.04 \mu\text{m}$.

(c) *Specimen cutter*

Consisting of a 25 mm thick 200 mm long 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 12 mm minus the thickness of a single razor blade (one of two razor blades used as cutting edges). The razor blades shall be held in position using side plates. The end of the cutter shall be cut away at a 45° angle to expose the cutting edge at one end of the blades. The edges shall be separated by a distance of 12 ± 0.25 mm.