

Australian Standard™

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

**Method 2.1: Physical properties—
Breaking strength**

STANDARDS
Australia



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Carmakers Institute of Australia
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PREFACE

This Standard was prepared by the Standards Australia Committee PK-025, Packaging Code to supersede, AS/NZS 1635.5.1:1995, *Methods of test for pressure-sensitive adhesive tape, Part 5.1: Breaking strength*.

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 2.1: Physical properties—Breaking strength

1 SCOPE

This Standard specifies the method for determining the breaking strength of pressure-sensitive adhesive tape.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 2193 Calibration and classification of force measuring systems
- 2313 Methods of test for single sided and double sided pressure-sensitive adhesive tape
- 2313.2.2 Method 2.2: Physical properties—Elongation

3 DEFINITIONS

For the purpose of this document, the following terms and definitions apply.

3.1 Elastic elongation

Tapes that exceed 200% elongation are considered to be elastic.

3.2 Non-elastic elongation

Tapes with elongation less than 200% are considered to be non-elastic.

4 APPARATUS AND MATERIALS

The following apparatus is required:

(a) *Tensile testing machine*

The tensile testing machine shall have a rate of travel 300 ± 10 mm/min of the moving jaw or carriage. The initial clear spacing between the machine jaws shall be 125 mm.

The calibration of the tensile testing machine shall comply with Grade B of AS 2193.

(b) *Specimen cutter*

Consisting of a 25 mm thick, 200 mm long and 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). 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 25 ± 0.25 mm.

5 TEST CONDITIONS

Testing shall be conducted at $23 \pm 5^\circ\text{C}$ and $50 \pm 5\%$ relative humidity.