

Australian Standard™

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

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



This Australian Standard was prepared by Committee PK-025, Packaging Code. It was approved on behalf of the Council of Standards Australia on 26 September 2005.
This Standard was published on 28 October 2005.

The following are represented on Committee PK-025:

Australian Paints Manufacturers Federation
Carmakers Institute of Australia
Department of Defence
Printing Industries Association of Australia
Department of Defence
Printing Industries Association of Australia

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 05287.

Australian Standard™

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

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

Originated as AS Z24.5.1—1968.
Previous edition AS/NZS 1635.5.1:1995.
Revised and redesignated as AS 2313.2.1—2005.

COPYRIGHT

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia
ISBN 0 7337 6954 3

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.

CONTENTS

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

STANDARDS AUSTRALIA

Australian Standard

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.