

Australian Standard<sup>®</sup>

**Pressure-sensitive and water activated  
adhesive tape for packaging and office  
applications**



This Australian Standard® was prepared by Committee PK-025, Packaging Code. It was approved on behalf of the Council of Standards Australia on 30 June 2006. This Standard was published on 25 July 2006.

---

The following are represented on Committee PK-025:

- Australian Paints Manufacturers Federation
  - Canmakers Institute of Australia
  - Printing Industries Associations of Australia
- 

This Standard was issued in draft form for comment as DR 06124.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through public comment period.

---

### **Keeping Standards up-to-date**

Australian Standards® are living documents that 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Standards may also be withdrawn.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 that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **[www.standards.org.au](http://www.standards.org.au)**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **[mail@standards.org.au](mailto:mail@standards.org.au)**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

---

Australian Standard<sup>®</sup>

**Pressure-sensitive and water activated  
adhesive tape for packaging and office  
applications**

Originated as AS Z13—1961, AS Z11—1959 and AS 2400.12—1985.  
Previous editions AS/NZS 1599:1997, AS 1602—1988 and AS 2400.12—1985.  
Revised, amalgamated and designated as AS 1599—2006.

**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 7644 2

## PREFACE

This Standard was prepared by the Standards Australia Committee PK-025, Packaging Code to supersede AS/NZS 1599:1997, *Pressure-sensitive adhesive packaging tapes*, AS 1602—1988, *Pressure sensitive adhesive filmic tapes for general office applications* and AS 2400.12—1985, *SAA Packaging Code, Part 12: Adhesive closing and sealing tapes*.

The objective of this edition is to specify new materials for pressure-sensitive adhesive tape and incorporate the requirements of AS 1602 and AS 2400.12 into this Standard.

This Standard assigns a new serial number to each kind of tape so as to address the continual development of new classifications of tape with their corresponding classes.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

## CONTENTS

	<i>Page</i>
FOREWORD.....	4
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE .....	5
1.2 REFERENCED DOCUMENTS .....	5
1.3 DEFINITIONS .....	6
1.4 CLASSIFICATION .....	6
SECTION 2 PHYSICAL REQUIREMENTS	
2.1 GENERAL .....	8
2.2 COLOUR.....	8
2.3 CORES .....	8
2.4 WIDTH.....	8
2.5 SPLICES .....	8
2.6 LENGTH.....	8
2.7 THICKNESS .....	8
2.8 BREAKING STRENGTH .....	9
2.9 ADHESION STRENGTH .....	9
2.10 UNWIND FORCE (LOW SPEED).....	9
2.11 SUPPLEMENTARY REQUIREMENTS .....	9
SECTION 3 WATER ACTIVATED ADHESIVE TAPES	
3.1 GENERAL .....	16
3.2 PAPER TAPES.....	16
3.3 CLOTH TAPES.....	16
SECTION 4 PACKAGING AND MARKING	
4.1 PACKAGING.....	17
4.2 MARKING .....	17
APPENDICES	
A PURCHASING GUIDELINES.....	18
B MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD .....	19
C PROPERTIES FOR PRESSURE-SENSITIVE AND WATER ACTIVATED ADHESIVE TAPE .....	21

## FOREWORD

Pressure-sensitive and water activated adhesive packaging tapes consist of a wide variety of base materials (e.g. paper, cloth, filmic, laminated), coated uniformly with a suitable adhesive composition and wound evenly into rolls on suitable cores.

The suitability of a tape for a particular packaging application depends on the base material of the tape and the conditions to which the taped package may be subjected in transit or in service.

A knowledge of the various tape constructions and their characteristics will assist the tape user to choose the most suitable for a given purpose. By selecting the correct tape, waste and possible damage to packaged goods will be avoided.

A condition sometimes exists in fresh tape, where the adhesive surface appears to be pockmarked. These pockmarks, commonly called fisheyes, result from small amounts of air entrapped between layers of tape during winding and in no way affect the quality of performance of the tape since they flow and disappear in time. This condition should not be considered as evidence of a lack of uniformity of adhesive coating.

## STANDARDS AUSTRALIA

### Australian Standard

## Pressure-sensitive and water activated adhesive tape for packaging and office applications

### SECTION 1 SCOPE AND GENERAL

#### 1.1 SCOPE

This Standard specifies the performance requirements for pressure-sensitive adhesive packaging tapes commonly used in packaging, sealing and labelling operations. Such applications include both non-permanent and permanent sealing, holding, identifying, covering, decorating repair and light packaging.

##### NOTES:

- 1 Purchasing guidelines and the main applications of the various tapes are given in Appendix A.
- 2 For water activated adhesive tape refer to Appendix C.

#### 1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

##### AS

- |          |                                                                                              |
|----------|----------------------------------------------------------------------------------------------|
| 1199     | Sampling procedures for inspection by attributes                                             |
| 1199.0   | Part 0: Introduction to the ISO 2859 attribute sampling system                               |
| 1199.1   | Part 1: Sampling schemes indexed by acceptable quality limit (AQL) for lot-by-lot inspection |
| 2313     | Methods of test for single sided and double sided pressure-sensitive adhesive tape           |
| 2313.0   | Part 0: Method selection guide                                                               |
| 2313.1.1 | Method 1.1: Adhesion—Peel adhesion                                                           |
| 2313.1.2 | Method 1.2: Adhesion—Quickstick                                                              |
| 2313.1.3 | Method 1.3: Adhesion—Rolling ball tack                                                       |
| 2313.1.4 | Method 1.4: Adhesion—Adhesion strength after water immersion                                 |
| 2313.1.5 | Method 1.5: Adhesion—Adhesion strength to own backing                                        |
| 2313.1.6 | Method 1.6: Adhesion—Unwind force                                                            |
| 2313.1.7 | Method 1.7: Adhesion—Resistance to static shear load at elevated temperature                 |
| 2313.2.1 | Method 2.1: Physical properties—Breaking strength                                            |
| 2313.2.2 | Method 2.2: Physical properties—Elongation                                                   |
| 2313.2.3 | Method 2.3: Physical properties—Length                                                       |
| 2313.2.4 | Method 2.4: Physical properties—Thickness                                                    |
| 2313.2.5 | Method 2.5: Physical properties—Water vapour transmission                                    |
| 2313.3.1 | Method 3.1: Ageing properties—Accelerated ageing                                             |
| 2400     | Packaging                                                                                    |
| 2400.1   | Part 1: Glossary of packaging terms                                                          |

##### AS/NZS ISO

- |      |                                                                    |
|------|--------------------------------------------------------------------|
| 9001 | Quality management systems—Requirements                            |
| 9004 | Quality management systems—Guidelines for performance improvements |