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# Australian Standard<sup>®</sup> 1599—1988

## PRESSURE SENSITIVE ADHESIVE PACKAGING TAPES

[Title allocated by Defence Cataloguing Authority: TAPE, PRESSURE SENSITIVE ADHESIVE  
(GENERAL PACKAGING APPLICATIONS) (NATO SUPPLY CLASSIFICATION 7510)]



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The following interests are represented on Committee PK/10:

Confederation of Australian Industry  
Department of Defence  
Government Supply Department, N.S.W.

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**AUSTRALIAN STANDARD**

# **PRESSURE SENSITIVE ADHESIVE PACKAGING TAPES**

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## PREFACE

This Standard was prepared by the Association's Committee on Pressure Sensitive Adhesive Tapes under the direction of the Packaging Standards Board, to supersede AS 1599—1981.

This Standard was prepared to bring the specification in line with current practice by providing for the following:

- (a) Reduction in backing thickness for filmic cellulose acetate tape from 0.05 mm to 0.035 mm and 0.045 mm and reduction in breaking strength from 65 N/25 mm to 45 N/25 mm and 60 N/25 mm respectively.
- (b) Expanding the description for filmic polyethylene tape to include transparent UV-stabilized tape.
- (c) Reduction in backing thickness for filmic polypropylene (Biaxially-oriented) tape from 0.06 mm to 0.05 mm as the 0.06 mm thickness tape was no longer sold in Australia.
- (d) Base material for serial numbers 26, 27 and 28 have been altered to rayon/cotton as either cotton/rayon or all rayon was currently being used.
- (e) Inclusion of an additional serial number to cover laminated polypropylene (glass filament) tape.

This Standard assigns a serial number to each kind of tape, the principle purpose of which is to facilitate ordering, particularly by the Defence Department, and in this regard has obviated the necessity for a special appendix for application by that Department.

Appendix A sets out properties and requirements for tapes that may be specified by the purchaser in addition to the mandatory requirements. Both the additional and mandatory requirements are summarized in Appendix B.

The Committee recognizes the continual development of new classification of tapes and these new classes will be considered in any future publication.

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## STANDARDS ASSOCIATION OF AUSTRALIA

## Australian Standard

## PRESSURE SENSITIVE ADHESIVE PACKAGING TAPES

## SECTION 1. SCOPE AND GENERAL

**1.1 SCOPE.** This Standard specifies performance requirements for pressure sensitive adhesive packaging tapes. It provides a classification system and construction details.

The main usages of the various tapes are indicated in Appendix C.

**1.2 APPLICATION.** This Standard applies to pressure sensitive adhesive tapes commonly used in packaging, sealing and labelling operations.

**1.3 REFERENCED DOCUMENTS.** The following Standards are referred to in this Standard:

AS	
1230	Glossary of terms for pressure sensitive adhesive tapes
1602	Pressure sensitive adhesive filmic tapes for general office applications
1635	Methods of testing pressure sensitive adhesive tapes
Method 3.1	Adhesion strength (AS 1635.3.1)
Method 3.3	Quickstick (AS 1635.3.3)
Method 3.5	Adhesion strength after water immersion (AS 1635.3.5)
Method 3.6	Adhesion strength to own backing (AS 1635.3.6)
Method 4.1	Stability—Accelerated ageing (AS 1635.4.1)
Method 5.1	Breaking strength (AS 1635.5.1)
Method 6.1	Elongation (AS 1635.6.1)
Method 7.1	Unwind characteristics (AS 1635.7.1)
Method 8.1	Length (AS 1635.8.1)
Method 9.1	Thickness (AS 1635.9.1)
Method 10.1	Holding power to standard panel (AS 1635.10.1)
Method 11.1	Water vapour permeability (AS 1635.11.1)

**1.4 DEFINITIONS.** For the purpose of this Standard, the definitions given in AS 1230 apply.

**1.5 DESCRIPTION.** Pressure sensitive 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.

NOTE: 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 or performance of the tape since they flow out and disappear in time. This condition should not be considered evidence of lack of uniformity of adhesive coating.

**1.6 CLASSIFICATION.** Pressure sensitive adhesive packaging tapes shall be classified according to the base material as follows:

- (a) *Paper tapes.*
  - (i) Crepe (impregnated).
  - (ii) Flatback (impregnated).
  - (iii) Flatback, kraft (non-impregnated).
- (b) *Filmic tapes.*
  - (i) Regenerated cellulose.
  - (ii) Cellulose acetate.
  - (iii) Polyvinyl chloride (PVC) (unplasticized and plasticized).
  - (iv) Polyester.
  - (v) Polyethylene.
  - (vi) Polypropylene (biaxially oriented and monoaxially oriented).
- (c) *Cloth tapes.*
  - (i) Untreated.
  - (ii) PVC or nitrocellulose (NC) coated.
  - (iii) Polyethylene coated.
- (d) *Laminated tapes.*
  - (i) Cellulose acetate film (viscose rayon filament, cellulose acetate filament, glass filament—high strength, and glass filament—low strength).
  - (ii) Polyester film (glass filament, viscose rayon filament, polyester filament).
  - (iii) Polypropylene film (glass filament).

NOTE: The functions and characteristics of the above classes, tapes and kind of tape are given in Appendix C. The tapes are summarized in Table 2.1 which includes a serial number for each to facilitate ordering (see Appendix C).