

Australian Standard™

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

**Method 3.1: Ageing properties—  
Accelerated ageing**



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.  
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The following are represented on Committee PK-025:

Australian Paint Manufacturers' Federation  
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## PREFACE

This Standard was prepared by the Standards Australia Committee PK-025, Packaging Code to supersede AS 1635.4.1—1993, *Methods of test for pressure-sensitive adhesive tape, Part 4.1: Stability of tape other than cellulose tape—Accelerated ageing*.

The objective of this revision is to revise the apparatus and materials used in the test methods of the AS 1635 series.

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## STANDARDS AUSTRALIA

### Australian Standard

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

### Method 3.1: Ageing properties—Accelerated ageing

#### 1 SCOPE

This Standard specifies the method for determining the deterioration of pressure-sensitive adhesive tape, other than cellulose tape, as measured by adhesive strength, and observation of any changes in adhesive properties, after simulating 12 months' natural ageing in roll form.

#### 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

2193 Calibration and clarification of force measuring systems

#### 3 REAGENT

##### 3.1 Isopropynol

Reagent grade is required.

NOTE: Acetone, reagent grade may also be used.

#### 4 APPARATUS AND MATERIALS

The following apparatus and materials are required:

(a) *Tension testing machine*

Complying with the requirements of AS 2193 for Grade B machines over suitable load ranges, and having a moving jaw or carriage with a rate of travel of  $300 \pm 10$  mm/min.

(b) *Electric oven*

Thermostatically controlled to a temperature of  $65 \pm 2^\circ\text{C}$ .

(c) *Humidity cabinet*

Providing a relative humidity of  $80 \pm 5\%$  at a temperature of  $65 \pm 2^\circ\text{C}$  with no condensation on the test panels or in the space in which the test panels are placed. The circulation over the test panels shall be regarded as negligible.

Alternatively, a desiccator or other suitable vessel containing a saturated solution of ammonium sulfate may be used to provide an atmosphere of approximately 96% relative humidity when maintained at a temperature of  $38 \pm 2^\circ\text{C}$  in a suitably regulated electric oven.