AS 2313.2.5—2005

Australian Standard™

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

Method 2.5: Physical properties—Water vapour transmission

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.
This Standard was published on 28 October 2005.

The following are represented on Committee PK-025:

Australian Paint Manufacturers' Federation
Canmakers Institute 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 Standards may also be withdrawn.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 05176.

Australian Standard™

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

Method 2.5: Physical properties—Water vapour transmission

Originally as AS Z24.11.1—1968.
Previous edition AS/NZS 1635.11.1:1995.
Revised and redesignated as AS 2313.2.5—2005.

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 6936 5

PREFACE

This Standard was prepared by the Standards Australia Committee PK-025, Packaging Code to supersede AS/NZS 1635.11.1:1995, *Methods of test for pressure-sensitive adhesive tape*, Part 11.1: *Water vapour transmission rate.*

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

CONTENTS

STANDARDS AUSTRALIA

Australian Standard

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

Method 2.5: Physical properties—Water vapour transmission

1 SCOPE

This Standard specifies the method for determining the water vapour transmission rate of pressure-sensitive adhesive tape.

2 REAGENTS

The following reagents are required:

2.1 Isopropynol

Reagent grade.

NOTE: A substitute of isopropynol is acetone, reagent grade.

2.2 Anhydrous calcium chloride

Particle size 0.5 mm to 2.0 mm. (Regenerate calcium chloride to a sufficient anhydrous state by heating at approximately 200°C for 2 h.)

3 APPARATUS AND MATERIALS

The following apparatus and materials are required:

(a) *Humidity cabinet*

Providing a relative humidity of 96 ±2% at a temperature of 38 ±2°C with no condensation on the test dishes or in the space in which the test dishes are placed. The circulation over the test dishes shall be regarded as negligible.

Alternatively, a desiccator or other suitable vessel containing a saturated solution of potassium sulfate may be used to provide an atmosphere of approximately 96% relative humidity when maintained at a temperature of 38 ±2°C in a suitably regulated electric oven.

(b) *Test dishes*

In the shape of flat flanged rectangular cups formed of brass sheet, and having the dimensions shown in Figure 1, which shows three sizes of dishes.

(c) *Analytical balance*

With a capacity of at least 200 g and having an accuracy of ±0.1 mg.

(d) *Dry silicon carbide paper*

280 grit.

4 TEST CONDITIONS

Testing shall be conducted at 23 ±5°C and 50 ±5% relative humidity.