Australian Standard™

Methods for testing flexible cellular polyurethane

Method 7: Determination of tear resistance

PREFACE

This Standard was prepared by the Standards Australia Committee PL/36, Flexible Polyurethane, to supersede AS 2282.7—1991.

During the preparation of this revision cognizance was taken of ISO 8067:1989, *Flexible cellular polymeric materials—Determination of tear strength*.

METHOD

1 SCOPE This Standard sets out a method for determining the tear resistance of flexible cellular polyurethane.

2 REFERENCE DOCUMENTS The following documents are referred to in this Standard:

AS
2193 Methods for calibration and grading of force-measuring systems of testing machines

2282 Methods for testing flexible cellular polyurethane
2282.1 Method 1: Sampling and conditioning of test specimens
2282.2 Method 2: Measurement of dimensions of test specimens

3 PRINCIPLE The resistance to tear is determined as the force required to propagate a tear in a pre-cut test piece.

4 APPARATUS The following apparatus is required:

(a) A power-driven testing machine capable of measuring the test force to an accuracy of 2 percent, in accordance with the requirements for Grade B machines in AS 2193. It shall be fitted with suitable grips for holding the test piece and applying a uniform pressure on the gripping surface.

It shall be equipped with an indicator that will remain at the point of maximum force or will record the point of maximum force at rupture of the test piece. The machine shall be adjusted to operate at a constant jaw separation speed from 50 mm/min to 500 mm/min.

(b) Means of cutting and measuring the thickness of the rectangular test piece, accurate to 0.2 mm.

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