Australian Standard™

Methods for testing flexible cellular polyurethane

Method 10: Accelerated ageing tests

PREFACE

This Standard was prepared by the Standards Australia Committee PL/36, Flexible Polyurethane, to supersede AS 2282.10—1979.

During the preparation of this revision cognizance was taken of ISO 2440:1997, *Flexible and rigid cellular polymeric materials—Accelerated ageing tests*.

METHOD

1 SCOPE This Standard sets out laboratory methods that are intended to imitate the effects of naturally occurring reactions such as oxidation or hydrolysis by humidity. The physical properties of interest are measured before and after the application of the specified treatments.

2 APPLICATION The effect of the ageing procedures on any of the physical properties of the material may be examined, but those normally tested are either the elongation and tensile properties, or the compression or indentation hardness properties.

These tests do not necessarily correlate either with service behaviour or with ageing by exposure to light.

3 REFERENCED DOCUMENTS The documents below are referred to in this Standard:

AS
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

4 APPARATUS

4.1 For heat ageing Oven with forced circulation, capable of maintaining the required temperature to within ±1°C.

NOTE: It is recommended that a device be used to record the temperature, preferably continuously.

4.2 For humidity ageing The following apparatus is required:

(a) The ageing apparatus shall be of such a size that the total volume of test pieces does not exceed 10 percent of the free air space, and such that the test pieces are free of strain, freely exposed to the ageing atmosphere on all sides and not exposed to light.