STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 3558.1—1999
Methods of testing plastics and composite materials sanitary plumbing fixtures Method 1: Determination of water absorption characteristics

RECONFIRMATION NOTICE

Technical Committee WS-003 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 30 September 2016.

The following are represented on Technical Committee WS-003:

Association of Accredited Certification Bodies
Australian Chamber of Commerce and Industry
CSIRO
Department of Agriculture and Water Resources (Australian Government)
Plastics New Zealand
Plumbing Distributors Association of New Zealand
Plumbing Products Industry Group
Testing Interests (Australia)

NOTES

AS 3558.1—1999
Reconfirmed 2016

Australian Standard™

Methods of testing plastics and composite materials sanitary plumbing fixtures

Method 1: Determination of water absorption characteristics

1 SCOPE

This Standard sets out a method for determining the water absorption characteristics of plastics material used as the surface of sanitary plumbing fixtures.

2 PRINCIPLE

Temperature-conditioned test pieces are weighed and then exposed, on one surface, to cold tap water for a specified period. The test pieces are then reweighed, and the percentage increase in mass are calculated. The average percentage increase in mass is then determined.

3 APPARATUS

The following apparatus is required:

(a) An analytical balance capable of reading to 0.01 g.

(b) A test jig that enables 2200 ±300 mm^2 of the surface material to be exposed to a head of water 50 ±5 mm. Typical apparatus is shown in Figure 1.

(c) An oven capable of maintaining a uniform temperature of 50 ±5°C.

4 TEST PIECES

Three test pieces are required. Each test piece shall have an area of 5000 ±300 mm^2, and shall be of a shape that is compatible with the test jig. Any backing or reinforcements shall not be removed from the test pieces.

5 PROCEDURE

The procedure shall be as follows:

(a) Condition the three test pieces in the oven at a uniform temperature of 50 ±5°C for 24 ±0.5 h.

(b) Clean the test pieces with a soft, dry, absorbent cloth.

(c) Weigh each test piece to determine its mass (m_1).

(d) Place a test piece in the test jig and add cold tap water to a height of 50 ±5 mm over the surface of the test piece.

(e) After 24 ±0.25 h drain all water and remove the test piece from the test jig. Wipe excess water from all surfaces and immediately weigh the test piece to determine its mass (m_2).

(f) Repeat Steps (d) and (e) with the remaining two test pieces.