

STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 3558.4—1999

Methods of testing plastics and composite materials sanitary plumbing fixtures
Method 4: Determination of resistance to surface scratching

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

Methods of testing plastics and composite materials sanitary plumbing fixtures

Method 4: Determination of resistance to surface scratching

1 SCOPE

This Standard sets out a method for determining the resistance to surface scratching of plastics material used in sanitary plumbing fixtures.

2 PRINCIPLE

A pencil with a lead of specified hardness is held at a specified writing angle to the surface of the material and is pushed across the material. The effect of the lead on the surface is then assessed.

3 APPARATUS

The following apparatus is required:

- (a) *Lead holder*—a mechanical lead holder suitable for use with the lead specified, e.g. a clutch-type pencil.
- (b) *Lead*—having a diameter of 2 ± 0.1 mm to fit the lead holder.
- (c) *Abrasive*—waterproof 400 grade abrasive paper.

4 TEST SPECIMEN

The test shall be conducted on any suitable surface of the sanitary plumbing fixture.

5 PREPARATION OF LEAD

The lead shall be dressed by holding the pencil vertically and rubbing the end on the abrasive paper until the lead is flat and free from chips and nicks.

After the dressing of the lead, 6 ± 1 mm of lead shall be allowed to protrude from the mechanical holder (see Figure 1).

A fresh edge is required for each test. The pencil shall be rotated or, if necessary, re-dressed. After the re-dressing of the lead, the pencil shall be adjusted to allow 6 ± 1 mm of lead to protrude from the mechanical holder (see Figure 1).