

Australian/New Zealand Standard®

Paints and related materials—Methods of test

Method 482.1: Determination of fastness to light of interior paint

PREFACE

This Standard was prepared by the Joint Australia/New Zealand Standards Committee CH/3 on Paints and Related Materials, under the direction of the Multitechnics Standards Policy Board.

The objective of this Standard is to revise the 1975 edition of AS 1580.482.1, *Fastness to light* and provide a modernized procedure for assessing fading in paints.

This method is based on AS 1580.482.1—1975 but has been reformatted and refers to current Standards.

METHOD

1 SCOPE This method describes a procedure for assessing the light-fastness of interior paints.

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

AS

1580 Paints and related materials—Methods of test

1580.481.0 Method 481.0: Coatings—Guide to assessing paint systems exposed to weathering conditions

ISO

105 Textiles—Tests for colour fastness

105-A02 Part A02: Grey scale for assessing change in colour

3 PRINCIPLE A painted test panel is affixed to the interior surface of an external, north-facing window and, after a specified period of exposure, any change in colour in the paint film is determined by comparing it with a reference specimen that has been stored away from light.

4 APPARATUS

4.1 Grey scale for change in colour—to ISO 105-A02.

4.2 Lightless container—a light-proof container, such as a ventilated, locked drawer.

NOTE: If the product is prone to yellowing or other colour change, suitable precautions should be taken, such as storage in a freezer.

4.3 Test panels—two panels, each 100 × 50 mm, of appropriate base material.

5 VIEWING ENVIRONMENT Examination of the test and reference panels should preferably be conducted indoors, out of direct sunlight under lighting conditions of not less than 500 lx. In addition, viewing should be carried out against a neutral background as defined in AS 1580.481.0.

6 PROCEDURE The procedure shall be as follows:

- (a) If required, pretreat the test panels by the appropriate methods.
- (b) Coat both panels with the test paint and dry them by the appropriate methods.
- (c) Fix the test panel approximately 20 mm from the interior surface of a clean window pane, using a suitable adhesive tape, with the painted side facing the glass. The pane shall be of common, transparent window glass, approximately 3 mm thick, and shall be vertical, facing approximately north and unshaded by surrounding buildings or trees.
- (d) Place the reference panel in the lightless conditioner.
- (e) After the specified period, place both test and reference panels in the viewing environment and assess the change in colour using the grey scale.

7 REPORT The report shall include the following information:

- (a) Name of testing authority.
- (b) Report number and date of issue.
- (c) Method used to store the reference panel.
- (d) Date of exposure of test panel and duration of the test.
- (e) Identification of paint under test.
- (f) Change in colour as assessed by the grey scale.
- (g) Reference to this Standard, i.e. AS/NZS 1580.482.1.