Australian Standard™

Paints and related materials—Methods of test

Method 409.2: Low temperature coalescence

1 SCOPE

This Standard sets out a method for determining the ability of a freshly applied latex paint film, typically applied at 30 to 50 µm dry film thickness, to coalesce at temperatures of 5°C to 8°C, after a specified drying period at that temperature.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS		
1580	Paints and related materials—Methods of test	
1580.102.1	Method 102.1:	Sampling procedure
1580.102.2	Method 102.2:	In-process sampling
1580.103.1	Method 103.1:	Examination and preparation of samples for testing
AS/NZS		
2310	Glossary of paint and painting terms	
2588	Gypsum plasterboard	

3 DEFINITION

For the purpose of this Standard, the definitions in AS/NZS 2310 apply.

4 PRINCIPLE

All test materials and apparatus are conditioned at low temperature before a thick coat of test paint is applied to a specified absorbent substrate by a drawdown applicator. The coating is allowed to air-dry at low temperature for a specified period, then examined for cracks, and checked by rubbing for non-coalescence.

5 APPARATUS

5.1 Applicator

Drawdown type applicator capable of spreading a film of test paint, of minimum width 100 mm, at a wet film thickness of 100 ±5 µm.

5.2 Low temperature chamber

Chamber capable of maintaining a temperature of 5°C to 8°C for a minimum of 24 h.

5.3 Magnifying lens

An optical lens capable of providing 10 × magnification.

5.4 Test panel

Test panel of nominal thickness 10 mm, cut from a sheet of commercially available, uncoated, paperfaced gypsum plasterboard conforming with AS 2588. The minimum dimensions of the panel shall be 200 mm × 200 mm.

5.5 Thermometer(s)

Thermometer(s) capable of measuring and recording the maximum and minimum temperatures of the low temperature chamber to an accuracy of ±0.5°C.