Australian Standard™

Paints and related materials—Methods of test

Method 454.1: Resistance to mineral oil and other organic liquids

1 SCOPE

This Standard sets out a method for determining the resistance of a paint coating to mineral oil or other organic liquids, by observing its change in appearance and scratch resistance after appropriate immersion.

NOTE: This method may be used for the determination of the resistance of a coating under any non-aqueous conditions, provided that the nature and temperature of the immersion fluid and the duration of the immersion are stated in the report.

2 REFERENCED DOCUMENTS

The following document are referred to in this Standard:

AS		
1580	Paints and related materials—Methods of test	
1580.101.5	Method 101.5:	Conditions of test—Temperature and humidity control
1580.403.1	Method 403.1:	Scratch resistance
1580.601.1	Method 601.1:	Colour—Visual comparison
AS/NZS		
1580.602.2	Method 602.2:	Measurement of specular gloss of non-metallic paint films at 20°, 60° and 85°
ISO		
3448	Industrial liquid lubricants—ISO viscosity classification	

3 PRINCIPLE

Two coated test panels are partially immersed in a mineral oil at a specified temperature for specified periods. After removal and being allowed to stand for a specified period, the immersed film is visually assessed for coating defects and the scratch resistance of both the immersed and un-immersed film is determined.

4 APPARATUS

The following is required:

(a) *Beaker*—of such size as will permit immersion of the test panels in the mineral oil for about 80 mm of their length.

(b) *Sratch resistance apparatus*—as specified for the scratch resistance test in AS 1580.403.1.

(c) *Temperature control apparatus*—capable of maintaining the temperature of the oil contained in the beaker at 50 ±2°C.