

Australian Standard®

Paints and related materials—Methods of test

Method 213.2: Dry hiding power—Contrast ratio

PREFACE

This Standard was prepared by the Standards Australia Committee on Paints and Related Materials, under the direction of the Multitechnics Standards Board, to supersede the 1976 edition. This revision was prompted by a need to improve the reproducibility of the existing method as highlighted in an interlaboratory test program conducted in 1988. The template area has been increased to 3600 mm² which will reduce errors in measurement.

FOREWORD

Paints cannot be readily applied at any nominated spreading rate with sufficient reproducibility to establish accurately a paint's contrast ratio. Thus, to establish the contrast ratio at any nominated spreading rate, films of thicknesses approaching the nominated film thickness are prepared and the actual spreading rate of each is determined from a knowledge of the wet paint density and non-volatile content by mass. Because there is an approximate linear relationship between the contrast ratio (CR) of conventional decorative white or light-coloured paints and the spreading rate, the contrast ratio at a nominated spreading rate can be interpolated from those of the prepared films. This method requires the preparation of four separate films of thickness spanning the specified spreading rate.

The graphical interpolation is made on the linear relationship of CR versus spreading rate, rather than the non-linear CR versus dry film mass, to overcome the difficulties of interpolation for non-linear plots.

METHOD

1 SCOPE This Standard describes procedures for the quantitative determination of the opacity (by contrast ratio measurement) of a dry, light-coloured paint film at a specified spreading rate.

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

AS	
1580	Methods of test for paint and related materials
1580.101.1	Method 101.1: Air drying conditions
1580.101.5	Method 101.5: Conditions of test, temperature and humidity controlled
1580.103.1	Method 103.1: Preliminary examination and preparation for testing
1580.202.1	Method 202.1: Density
1580.202.2	Method 202.2: Density of water dispersed paints subject to foaming
1580.301.1	Method 301.1: Non-volatile content
2310	Glossary of paint and painting terms