

# Australian Standard™

## Paints and related materials—Methods of test

### Method 504.1: Metallic zinc content

AS 1580.504.1—2005

#### PREFACE

This Standard was prepared by the Standards Australia Committee CH-003, Paints and Related Materials to supersede the 1993 edition.

#### METHOD

##### 1 SCOPE

This method describes a procedure for determining the metallic zinc content in zinc dust and inorganic zinc silicate paints. The method is suitable for use with zinc dust and with solvent-borne or water-borne inorganic zinc silicate paints known by analysis to be free of other materials which react with acids to produce gaseous by-products.

##### 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1152 Specification for test sieves

AS/NZS

3750 Paints for steel structures

3750.15 Part 15: Inorganic zinc silicate paint

ISO

383 Laboratory glassware—Interchangeable conical ground joints

##### 3 PRINCIPLE

A finely ground sample of zinc dust or a dried film or zinc silicate paint is reacted with hydrochloric acid and the volume of hydrogen evolved is measured.

##### 4 OCCUPATIONAL HEALTH AND SAFETY

During handling follow precautions for use outlined in suppliers Materials Safety Data Sheet (MSDS). Care should be exercised when handling acids.

##### 5 REAGENTS

###### 5.1 General

Unless otherwise specified, all reagents shall be of analytical quality. Distilled water or water of equivalent purity shall be used throughout.