Australian Standard®

Site testing of protective coatings

Method 4: Assessment of degree of cure

PREFACE

This Standard was prepared for the Standards Australia Committee on Paints and Related Materials, under the direction of the Multitechnics Standards Policy Board, by the Subcommittee on Site Testing of Protective Coatings.

FOREWORD

A test for the degree of cure will assist in determining whether a coating is suitable for service and whether quality control procedures, such as adhesion and pinhole testing, may be performed.

The firmness of the surface of a coating or its solvent resistance does not necessarily determine the degree of cure, as a coating may achieve surface dryness with a degree of hardness and still be soft underneath. Some coatings, such as elastomeric urethane, are permanently soft and pliable yet fully cured.

These field tests provide a guide for use with other tests in the AS 3894 series.

METHOD

1 SCOPE This Standard provides guidance on procedures, for use in the field, to assess the degree of cure or through-dry in coatings.

Applicable coatings include those which dry by oxidation (e.g. alkyd), solvent evaporation (e.g. lacquers such as chlorinated rubber), those that set by chemical reaction with a liquid curing agent (e.g. epoxy) and those that react with the atmosphere (e.g. inorganic zinc).

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

AS	
1487	Abrasive grain size
1580	Paints and related materials—Methods of test
1580.405.1	Method 405.1: Determination of pencil hardness of paint film
2105	Inorganic zinc silicate paint
ASTM	
D 2240	Test method for rubber property—Durometer hardness
D 2583	Test method for indentation hardness of rigid plastics by means of a Barcol impressor
D 4752	Test method for measuring MEK resistance of ethyl silicate (inorganic) zinc-rich primers by solvent rub