Australian Standard™

AS 3894.4

Site testing of protective coatings

Method 4: Assessment of degree of cure

PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee CH-003, Paints and Related Materials, to supersede AS 3894.1—1991. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

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/NZS 3894 series.

METHOD

1 SCOPE

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

Applicable coatings include those that 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 DEFINITIONS

For the purpose of this Standards the definition given in AS 2310 apply.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS	
1580	Paints and related materials — Methods of test
1580.405.1	Method 405.1: Determination of pencil hardness of paint film
2310	Glossary of paint and painting terms