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Australian Standard®

Liquid membrane-forming curing compounds for concrete

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STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee BD/33, Chemical Admixtures for Concrete. It was approved on behalf of the Council of Standards Australia on 6 August 1990 and published on 12 November 1990.

The following interests are represented on Committee BD/33:

Association of Consulting Engineers, Australia

AUSTROADS

Cement and Concrete Association of Australia

Confederation of Australian Industry

Department of Administrative Services (Construction Group)

National Building Technology Centre

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PREFACE

This Standard was prepared by the Standards Australia Committee on Chemical Admixtures for Concrete. In its preparation note was taken of the terms used in ASTM C 309, *Specification for liquid membrane-forming compounds for curing concrete,* and ASTM C 156, *Test method for water retention by concrete curing materials,* and acknowledgement is made of the assistance received from these sources.

In the preparation of this Standard, considerable effort was expended in an attempt to produce a Product Standard for Curing Compounds. However, the Committee felt strongly that the document should include requirements which have become acceptable within the industry, but which by their nature, are not in themselves, verifiable. Since product Standards are required to define compliance in terms of parameters which are independently verifiable, this aspect was not acceptable to Standards Australia, and the issue became a major stumbling block to effective progress. Indeed, it eventually proved to be impossible to meet the requirements of industry as identified by the Committee within the format of a product Standard as defined by Standards Australia. Accordingly, this document is *not* a Product Standard.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard sets out recommendations, for liquid membrane-forming curing compounds for concrete (referred to as curing compounds). Appendices set out sampling procedure, methods of test for water retention efficiency and drying time, and a final appendix discusses the use of curing compounds.

NOTE: Compounds meeting the recommendations may prove unsuitable for use where subsequent rendering or topping is proposed.

1.2 APPLICATION This Standard is not a product Standard, but is intended as a means by which curing compounds may be classified and described, and by which their performance may be assessed. Certain aspects of these materials make compliance with a general performance Standard difficult to codify. These aspects include the following:

(a) The nature of the different materials offered for sale as curing compounds.

(b) The different application methods.

Consequently, the Standard makes recommendations, based on established testing procedures. It is not, in itself, however, fully inclusive of all requirements for product certification.

1.3 REFERENCED DOCUMENTS The documents below are referred to in this Standard:

AS
1160 Bitumen emulsions for construction and maintenance of pavements

1216 Classification, hazard identification and information systems for dangerous goods
1216.1 Part 1: Classification and class labels for dangerous goods

1315 Portland cement

1580 Methods of test for paints and related materials
1580.202.1 Density
1580.211.1 Degree of settling
1580.214.5 Consistency—Rotational viscometer
1580.301.1 Non-volatile content
1580.604.1 45°, 0° reflectance of white and pale coloured paint

2350 Methods of testing portland and blended cements
2350.11 Compressive strength of portland and blended cements

2701 Methods of sampling and testing mortar for masonry constructions
2701.7 Method for determination of water retention

ASTM
C 156-80a Test method for water retention by concrete curing materials

C 778-80a Specification for standard sand

D 1309-83 Test method for settling properties of traffic paints during accelerated storage

1.4 DEFINITIONS For the purpose of this Standard, the definitions below apply.

1.4.1 Vehicle—total sum of the constituents of the liquid phase of the curing compound.

1.4.2 Vehicle solids—all non-volatile material with the exception of pigment or dye.

1.4.3 Resins—either natural or synthetic polymeric materials containing (where appropriate) added plasticizing materials.

1.4.4 Plasticizing materials—non-volatile modifying agent added to prevent embrittlement of resin.

1.4.5 Flammable—capable of being ignited and of burning in air.

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