

Australian Standard™

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**Liquid membrane-forming curing  
compounds for concrete**

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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 4 September 1998 and published on 5 November 1998.

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The following interests are represented on Committee BD/33:

Association of Consulting Engineers Australia  
Australian Chamber of Commerce and Industry  
Australian Concrete Repair Association  
Australian Pre-mixed Concrete Association  
AUSTROADS  
Cement and Concrete Association of Australia  
Concrete Institute of Australia  
Department of Land and Water Conservation N.S.W.  
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*This Standard was issued in draft form for comment as DR 97547.*

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Originated as AS 3799—1990.  
Second edition 1998.

## PREFACE

This Standard was prepared by the Standards Australia Committee BD/33, Chemical Admixtures for Concrete, to supersede AS 3799—1990.

The objective of this Standard is to provide manufacturers and users of liquid membrane-forming curing compounds for concrete, with specification covering classification and performance of curing compounds. It addresses sampling procedures, methods of test for water retention efficiency and drying time and provides general information on and properties of curing compounds.

The original issue of the standard was found to be not acceptable as a Product Standard, because it included reference to a method of classification by composition which was not verifiable within the terms of the Standard. Accordingly, the Standard was deemed to be 'not a Product Standard' and the section describing the types of classification, e.g. Wax Emulsion, Chlorinated Rubber, and so on, was included in Informative Appendix D, and omitted from the main body of the standard.

The Committee have decided that the situation has changed from that which applied at the time the Standard was first issued, in that the classification by composition is now verifiable by means of the Material Safety Data Sheet (MSDS), which is a compulsory requirement for each product, and which must indicate the composition of the ingredients of the product. The MSDS is a legally verifiable document and fulfils the requirements of Standards Australia for this purpose. There is, therefore, no obstacle to AS 3799 being classed as a Product Standard.

As originally issued, the procedure in Appendix B, Water retention efficiency, allowed for the application rate of the compound to be varied from the standard value of 5 m<sup>2</sup>/L as 'specified by the manufacturer' (Clause B9.1.1). This provision was found to give unreliable comparison between different compounds and, consequently, this allowable variation has been removed, and any application rate other than the standard rate will now be regarded as non-standard.

Other minor changes to the text include modification to the mortar mixing procedure to make it more workable without changing the nature of the mortar, and expanding the Definitions section to make it more informative.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the Appendix to which they apply. A 'normative' Appendix is an integral part of a Standard, whereas an 'informative' Appendix is only for information and guidance.

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## STANDARDS AUSTRALIA

## Australian Standard

## Liquid membrane-forming curing compounds for concrete

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE** This Standard sets out requirements for liquid membrane-forming curing compounds for concrete (referred to as curing compounds). It specifically excludes compounds applied to concrete, which do not form a membrane as defined in Clause 1.4, Definitions, of this Standard.

Appendices set out sampling procedure, methods of test for water retention efficiency and drying time, and a final appendix discusses general information and properties of curing compounds.

**1.2 APPLICATION** This Standard is a means by which curing compounds can be classified and described, and their performance assessed. The Standard sets limits of performance in a number of properties, and curing compounds that comply with these limits shall be regarded as being in compliance with AS 3799 for those properties.

This Standard may also be used to test curing compounds to a method recommended by the manufacturer, which involves a modification to the application procedure in Appendix B, in that an application rate other than the standard 5 m<sup>2</sup>/L is used, or the compound is applied in multiple coats with a drying interval between. When the standard method is so modified, the result shall be reported as Non-standard and shall not be used for the determination of compliance with this Standard.

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

## AS

1160	Bitumen emulsions for construction and maintenance of pavements
1216	Class labels for dangerous goods
1580	Paints and related materials—Methods of test
1580.301.1	Non-volatile content by mass
2350	Methods of testing portland and blended cements
2350.12	Preparation of a standard mortar and moulding of specimens
2701	Methods of sampling and testing mortar for masonry constructions
2701.7	Method for determination of water retention
3972	Portland and blended cements

## AS/NZS

1580	Paints and related materials—Methods of test
1580.202.1	Density
1580.202.2	Density of water—Dispersed paints subject to foaming
1580.211.1	Degree of settling
1580.214.5	Consistency—Rotational viscometer

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