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Australian STANDARD®

STANDARDS Australia

Bituminous emulsions for pavements



AS 1160:2026

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Australian Chamber of Commerce and Industry
Australian Flexible Pavement Association
Australian Institute of Petroleum
Austroads
AustStab
Department of Transport and Planning (VIC)
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Additional Interests:

Civil Contractors New Zealand
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How to read this Standard

This page explains the meaning of the language and structure of this Standard.

Refer to Standards Australia's Standardisation Guide 006 for more details about drafting rules.

Australian and Australian/New Zealand Standards are voluntary unless they are referenced in legislation or called up in contracts.

Requirements

To conform to a Standard, all requirements in the Standard need to be met.

A requirement is any statement in the Standard which uses the word "shall".

Recommendations, permissions and possibilities

The following words are commonly used in Standards, but statements using them do not have to be followed to conform to the Standard:

(a) "should" means that something is recommended.

(b) "may" means that something is permitted.

(c) "can" means that something is possible.

Structure of Standards

A Standard always has the following parts:

(i) The Preface states who developed the Standard, what the Standard is aiming to do, and how it relates to other documents.

(ii) The Scope states what the Standard is about, what it covers and what it does not cover.

(iii) The Normative references clause lists other documents that are referenced in the Standard as part of requirements.

(iv) The Terms and definitions clause defines important terms to help with understanding the Standard.

A Standard may also include other parts, such as the following:

(1) A normative appendix sets additional requirements that need to be conformed to.

(2) An informative appendix provides additional information or guidance. They usually do not contain requirements. If an informative appendix does contain requirements, the Standard will explain when those requirements apply.

(3) A Bibliography lists documents referenced in the Standard but not as part of requirements.

Many Standards include notes. Notes provide recommendations and/or guidance only. They never contain requirements.

Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CH-025, Bitumen and Related Products (for Roadmaking), to supersede AS 1160:1996, *Bituminous emulsions for the construction and maintenance of pavements*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this document as an Australian Standard rather than an Australian/New Zealand Standard.

This document specifies requirements for bituminous emulsions intended for use in the construction and maintenance of pavements.

This document is one of a series relating to material for roadmaking purposes. Other Standards in the series are as follows:

(a) AS 2008, *Bitumen for pavements*

(b) AS 2157, *Cutback bitumen*

(c) AS 3568, *Oils for reducing the viscosity of bituminous binders for pavements*

The major changes in this edition are as follows:

(i) Removal of AMS and CMS grades from the 60 % binder content emulsion properties table (Table 6.1).

(ii) Update to the high binder content emulsion properties table (Table 6.2).

(iii) Inclusion of new property tables associated with latex-modified emulsions (Table 6.3), emulsified polymer modified binders (Table 6.4), emulsion primes (Table 6.5) and high-float emulsions (Table 6.6).

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Bituminous emulsions for pavements

Section 1 Scope and general

1.1 Scope

This document specifies requirements for bituminous emulsions intended for use in the construction and maintenance of pavements.

WARNING THE USE OF THIS DOCUMENT MAY INVOLVE HAZARDOUS MATERIALS, OPERATIONS AND EQUIPMENT. THIS DOCUMENT DOES NOT PURPORT TO ADDRESS ALL OF THE SAFETY PROBLEMS ASSOCIATED WITH ITS USE. IT IS THE RESPONSIBILITY OF THE USER OF THIS DOCUMENT TO ESTABLISH APPROPRIATE SAFETY AND HEALTH PRACTICES AND DETERMINE THE APPLICABILITY OF REGULATORY LIMITATIONS PRIOR TO USE.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 2008, *Bitumen for pavements*

AS 2341.4, *Methods of testing bitumen and related roadmaking products, Method 4: Determination of dynamic viscosity by rotational viscometer*

AS 2341.9, *Methods of testing bitumen and related roadmaking products, Method 9: Determination of water content (Dean and Stark)*

AS 2341.18, *Methods of testing bitumen and related roadmaking products, Method 18: Determination of softening point (ring and ball) method*

AS 2341.26, *Methods of testing bitumen and related roadmaking products, Method 26: Determination of sieve residue*

AS 2341.27, *Methods of testing bitumen and related roadmaking products, Method 27: Determination of sedimentation*

AS 2341.28, *Methods of testing bitumen and related roadmaking products, Method 28: Determination of stone coating ability and water resistance*

AS 2341.29, *Methods of testing bitumen and related roadmaking products, Method 29: Determination of breaking behaviour by setting time*

AS 2341.30, *Methods of testing bitumen and related roadmaking products, Method 30: Recovery of residue from bituminous emulsion*

AS 2341.32, *Methods of testing bitumen and related roadmaking products, Method 32: Determination of pH of bituminous emulsions*

AS 3568, *Oils for reducing the viscosity of bituminous binders for pavements*

AS/NZS 2341.2, *Methods of testing bitumen and related roadmaking products, Method 2: Determination of dynamic viscosity by vacuum capillary viscometer*

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