



## **Methods of testing bitumen and related roadmaking products**

### **Method 3: Determination of kinematic viscosity by flow through a capillary tube**



AS 2341.3:2020

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- Australian Institute of Petroleum
- Australian Road Research Board
- Austrroads
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## Preface

This Test Method was prepared by the Australian members of Joint Standards Australia/Standards New Zealand Committee CH-025, Bitumen and Related Products (for Roadmaking), to supersede AS 2341.3—1993.

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

The objective of this Test Method is to specify procedures for the determination of kinematic viscosity of bituminous materials having kinematic viscosities in the range 6 mm<sup>2</sup>/s to 100 000 mm<sup>2</sup>/s (approximate dynamic viscosities 0.006 Pa.s to 100 Pa.s) using four different types of reverse flow capillary tube viscometers.

This Test Method references ASTM D2170/D2170M-18, *Standard Test Method for Kinematic Viscosity of Asphalts*, for use in Australia, subject to modifications set out in [Appendix A](#).

[Appendix A](#) lists the variations to ASTM D2170/D2170M-18 for the application of this Test Method in Australia.

Users of this Test Method are advised that they must purchase ASTM D2170/D2170M-18 in addition to this Test Method.

The terms “normative” or “mandatory information” and “informative” or “nonmandatory information” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or “mandatory information” annex is an integral part of a Standard, whereas an “informative” or “nonmandatory information” appendix is only for information and guidance.

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## NOTES

# Australian Standard®

## Methods of testing bitumen and related roadmaking products

### Method 3: Determination of kinematic viscosity by flow through a capillary tube

#### 1 Scope

The objective of this Test Method is to specify procedures for the determination of kinematic viscosity of bituminous materials having kinematic viscosities in the range 6 mm<sup>2</sup>/s to 100 000 mm<sup>2</sup>/s (approximate dynamic viscosities 0.006 Pa.s to 100 Pa.s) using four different types of reverse flow capillary tube viscometers.

#### 2 Application

ASTM D2170/D2170M-18 is the 2018 edition. Only the 2018 edition shall be used in accordance with this Test Method.

#### 3 Normative references

The following normative document is referred to in this Standard in addition to those referenced in ASTM D2170/D2170M-18. The following document is referred to in the text in such a way that some or all of its content constitutes requirements of this Standard.

AS/NZS 2341.21, *Method of testing bitumen and related roadmaking products, Method 21: Sample preparation*

#### 4 Terms and definitions

For the purpose of this document the terms and definitions in this Test Method and ASTM D2170/D2170M-18 apply.

##### 4.1

##### **may**

indicates the existence of an option

##### 4.2

##### **shall**

indicates that a statement is mandatory

##### 4.3

##### **should**

indicates a recommendation

#### 5 Operation

The requirements of ASTM D2170/D2170M-18 shall apply subject to the modifications set out in [Appendix A](#) for Australian conditions.