

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION

OF

AS/NZS 2341.13:1997

Methods of testing bitumen and related roadmaking products

Method 13: Long-term exposure to heat and air

RECONFIRMATION NOTICE

Technical Committee CH-025 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 14 May 2013.

Approved for reconfirmation in New Zealand on behalf of the Standards Council of New Zealand on 20 May 2013.

The following are represented on Technical Committee CH-025:

Australian Road Research Board (ARRB)
Australian Asphalt Pavement Association
Australian Chamber of Commerce and Industry
Australian Institute of Petroleum
AUSTROADS
Engineers Australia
National Association of Testing Authorities Australia
Roading New Zealand
Transit New Zealand

NOTES

Australian/New Zealand Standard®

Methods of testing bitumen and related roadmaking products

Method 13: Long-term exposure to heat and air

1 SCOPE This Standard sets out a method based on the accelerated aging of bitumen to determine the time required for bitumen to reach a viscosity level associated with distress in pavement surfacings.

NOTES:

- 1 The results of the test may be used to predict likely resistance to hardening of a bitumen in sprayed surfacings and in thin asphalt surfacings which are permeable to air.
- 2 The method takes too long to be used for 'day-to-day' quality control and is intended for occasional checking of quality, particularly where there has been a change in refinery crude feedstock or processing.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- 1681 Electrically-heated ovens in which flammable volatiles occur—Type 1 ovens
2008 Residual bitumen for pavements
2341 Methods of testing bitumen and related roadmaking products

AS/NZS

- 2341.5 Determination of apparent viscosity by 'Shell' sliding plate micro-viscometer
2341.10 Determination of the effect of heat and air on a moving film of bitumen (rolling thin film oven (RTFO) test)

BS

- 593 Specification for laboratory thermometers

IP

- Methods for analysis and testing, Part 1, Vol. 2, Appendix A

3 APPLICATION This method of test is applicable to bitumens specified in AS 2008 which have been subjected to the rolling thin film oven (RTFO) test treatment described in AS/NZS 2341.10.

NOTES:

- 1 When the relatively non-volatile residual bitumens used for paving are tested by this method, hardening produced by the treatment is mainly due to chemical attack by oxygen.
- 2 If the test is used to evaluate other types of bituminous paving binders, a check should be carried out to determine whether the observed hardening is caused, in part, by evaporation of volatile constituents.