

# Australian/New Zealand Standard™

AS/NZS 2341.23

## Methods of testing bitumen and related roadmaking products

### Method 23: Determination of residue from evaporation

#### 1 SCOPE

This Standard sets out a method for determining the residue from evaporation of bitumen emulsion.

#### 2 REFERENCED DOCUMENT

The following document is referred to in this Standard:

AS/NZS

2341 Methods of testing bitumen and related roadmaking products

2341.1 Part 1: Precision data — Definitions

#### 3 PRINCIPLE

A sample of the emulsion is weighed in a container, evaporated on a hotplate to remove water and non-aqueous volatiles and reweighed. Residue from evaporation is calculated from the mass of the sample and residue after evaporation.

#### 4 APPARATUS

The following apparatus is required:

- (a) *Balance* A balance of suitable capacity, accurate to 0.003 g and readable to 0.001 g.
- (b) *Desiccator*
- (c) *Hotplate* A hotplate with a variable temperature control.
- (d) *Metal or glass container* A metal or glass container, approximately 75 mm in diameter and 105 mm deep, provided with a small wire or glass stirrer.
- (e) *Thermostatically controlled convection oven* A thermostatically controlled convection oven capable of maintaining a temperature within the range 105°C to 110°C.

#### 5 PROCEDURE

The procedure shall be as follows:

- (a) Dry the container and stirrer in a thermostatically controlled convection oven at 105°C to 110°C for 1 h and allow it to cool in a desiccator.
- (b) Tare the container and stirrer.
- (c) Weigh  $10 \pm 1$  g of the emulsion in the container and record the mass of the sample ( $m_2$ ) to the nearest 0.001 g.