

Australian/New Zealand Standard™

AS/NZS 2341.26

Methods of testing bitumen and related roadmaking products

Method 26: Determination of sieve residue

1 SCOPE

This Standard sets out a method for determining the quantity of bituminous emulsion residue that is retained on a specified sieve.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1152 Specification for test sieves

AS/NZS

2341 Methods of testing bitumen and related roadmaking products

2341.1 Part 1: Precision data — Definitions

3 PRINCIPLE

An emulsion is strained through a weighed sieve to quantify the presence of coarse binder particles that may indicate adverse storage, handling or application effects.

4 APPARATUS

The following apparatus is required:

- (a) *Balance* A balance of at least 200 g capacity, accurate to 0.003 g and readable to 0.001 g and a balance of approximately 5 kg capacity, readable to 0.1 g and accurate to 0.3 g.
- (b) *Glass beaker* A glass beaker of 600 mL capacity.
- (c) *Glass conical flask or beaker* A glass conical flask or beaker of 250 mL capacity.
- (d) *Sieve* Sieves, complying with AS 1152, fitted with a wire mesh having an aperture of 710 µm in a frame of about 100 mm diameter, and 150 µm in a frame of about 75 mm diameter and about 25 mm depth.
- (e) *Solution of surfactant* A solution of surfactant compatible with the emulsion.
- (f) *Thermostatically controlled oven* A thermostatically controlled oven with ventilation, capable of maintaining a temperature within the range 105°C to 110°C.
- (g) *Watch glass* Two watch glasses of about 100 mm diameter.

NOTE: If available from the supplier, the surfactant solution should be used. If such a medium is not supplied, then, for cationic emulsion, a solution 1% (m/m) of cetrimide (a mixture of alkyltrimethylammonium bromides) in 0.1 mol/L HCl has been found suitable, and for anionic emulsion, any suitable anionic surfactant may be employed.