Transport Roads & Maritime Services

NSW GOVERNMENT

Test method T268

Determination of clay and fine silt content in fine aggregate (settling method)

OCTOBER 2012

Revision Summary

Ed/Rev Number	Clause Number	Description of Revision	Authorisation	Date
		Reformatted and Revision Summary Added	D.Dash	May 1999
		Date on Test Method Revised to Agree with Date on Revision Summary	D.Dash	Feb 2001
Ed 2/ Rev 0	All	Reformatted RMS template	J Friedrich	October 2012

Note that Roads and Maritime Services is hereafter referred to as 'RMS'.

The most recent revision to Test method T268 (other than minor editorial changes) are indicated by a vertical line in the margin as shown here.

Test method T268

Determination of clay and fine silt content in fine aggregate (settling method)

1. Scope

This test method sets out the procedure for estimating the volume of silt, loam, clay and similar materials in fine aggregates. It is not generally applicable to crushed stone sands. The method conforms to the method described in Australian Standard 1141.

2. Apparatus

(a) Stoppered measuring cylinder, 250 mL

(b) Reagent: common salt

3. Test Portion

(a) Fine aggregate shall be tested in the condition in which is received

(b) Obtain, by quartering, a test portion of approximately 100 mL

4. Solution Required

Salt Solution: 10 g common salt in 1 litre of water to provide a nominal 1%.

5. Procedure

(a) Place about 50 mL of the salt solution in a 250 mL stoppered measuring cylinder. Pour aggregate into the cylinder until its measured volume in the cylinder is 100 mL. Make the volume up to 150 mL by the addition of more salt solution

(b) Shake the mixture vigorously until adherent particles have been dispersed. Place the measuring cylinder on a level surface, and gently tap it until the surface of the aggregate is level

(c) Allow the measuring cylinder and contents to stand for three hours. At the end of that time note the volume of the sand (S) and the volume of the settled clay and fine silt (F)

6. Calculations

Calculate the percentage (by volume) of clay and fine silt as follows:

$$C = \frac{F}{S} \times 100$$

Where C = percentage by volume of clay and fine silt
F = volume of settled clay and fine silt
S = volume of sand after settling

7. Reporting

Report the percentage of clay and fine silt, by volume, to the nearest 0.5%.