

State of Nevada
Department of Transportation
Materials Division

METHOD OF TEST FOR SAND EQUIVALENT

Follow AASHTO T 176-08 in its entirety with the following exceptions:

4.7. Note 2, delete the second sentence.

4.9. Delete the last sentence.

4.11. Delete and replace with:

A thermostatically controlled drying oven capable of maintaining a temperature of $60 \pm 3^{\circ}\text{C}$ ($140 \pm 5^{\circ}\text{F}$).

5.1. Delete and replace with:

The test may be performed without strict temperature control; however any referee testing must be performed with the temperature of the working solution at $22 \pm 3^{\circ}\text{C}$ ($72 \pm 5^{\circ}\text{F}$).

7. SAMPLE PREPARATION Delete this section in its entirety and replace with:

7.1. Prepare sand equivalent test samples from the passing 4.75 mm (No. 4) sieve portion of the material to be tested. Oven dry the samples at $60 \pm 3^{\circ}\text{C}$ ($140 \pm 5^{\circ}\text{F}$) sufficiently to permit a complete separation on the 4.75 mm (No. 4) sieve. Be sure all fines are cleaned from the retained 4.75 mm (No. 4) sieve portion and included with the passing 4.75 mm (No. 4) sieve material.

7.2. Split or quarter enough material from the passing 4.75 mm (No. 4) portion to fill the 85 mL (3 oz) tin to within 0.48 mm (3/16 in.) of the brim (three tins of material are required for source and contract samples) without overflowing the tin. Use extreme care in the sand equivalent test sample preparation to obtain a truly representative sample. Striking off the tin measure level is not allowed. Adjustments are usually required to provide the desired test sample size. However, make these adjustments before the sample is reduced below a volume equal to four tin measures, or approximately 450 g for material of average specific gravity.

Note: Experiments show that as the amount of material being reduced by splitting or quartering is decreased, the accuracy of providing representative portions is decreased. For this reason, it is imperative that the sand equivalent test sample, which is already relatively small, be split or quartered carefully. When it appears necessary, dampen the material to avoid segregation or loss of fines.

- 7.3. After obtaining the 85 mL (3 oz) tin measure of material, then dry the test samples in the tin, in an oven, to a constant mass at $60 \pm 3^{\circ}\text{C}$ ($140 \pm 5^{\circ}\text{F}$) and cool to room temperature before testing.
- 8.4.3. Delete this subsection and figure 4., the Hand Method will not be allowed.
- 9.3.2. Each of the three sand equivalent values must be within ± 4 points from the average of these values.