

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
MATERIALS CONTROL, SOILS AND TESTING DIVISION

MATERIALS PROCEDURE

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PERCENT OF SOLIDS IN THE LATEX USED IN LATEX  
MODIFIED COMPOSITIONS

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1.0 PURPOSE

- 1.1 To set forth a procedure for determining the solids content of the latex for use in latex modified compositions.

2.0 SCOPE

- 2.1 This procedure shall be used to determine the solids content of all latex materials used in latex modified compositions.

3.0 EQUIPMENT

- 3.1 Aluminum weighing dishes (approximately six centimeters in diameter and two centimeters deep), Fisher 8-732 or equivalent.
- 3.2 Glass vials with cork stoppers, (one dram capacity), Owens-Illinois 60900 or equivalent.
- 3.3 Analytical balance (accurate to 0.1 milligram)

4.0 PROCEDURE

- 4.1 Weigh three aluminum dishes individually to 0.1 milligram. This is weight A.
- 4.2 Mix sample thoroughly.
- 4.3 Place sample into three vials, fill to approximately 2/3 of capacity, stopper immediately.
- 4.4 Weigh each vial and stopper. This is weight B.

- 4.5 Place approximately one gram of sample from the vial into the preweighed dish. Care should be taken to avoid getting the sample on outside of vial.
- 4.6 Immediately reweigh the vial and stopper. This is weight C.
- 4.7 Place samples in the oven at  $141 \pm 2^{\circ}\text{C}$  for two hours.
- 4.8 Place samples in desiccator to cool.
- 4.9 Reweigh samples. This is weight F.
- 5.0 CALCULATIONS
- 5.1  $D = B - C$   
Where D = sample weight
- 5.2  $E = F - A$   
Where E = weight of solids
- 5.3  $S = \frac{E}{D} \times 100$   
Where S = total solids in percent
- 5.4 The solids content of the sample is the average of the three tests.
- 5.5 If the range of the three tests exceeds 1.00 percent, repeat the test procedure.

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