

Method of Test for Water Asphalt Preferential (W.A.P.)

1. Scope:

This test is for measuring water asphalt preferential.

2. Apparatus:

- 2.1 Electric hot plate capable of maintaining a temperature of 140°F.
- 2.2 Glass jars, minimum of 4 oz., maximum of 8 oz.
- 2.3 Water bath capable of holding 4 glass jars.
- 2.4 Electric stirrer (Mixer), 1500 RPM with rod and paddle to fit glass jars.
- 2.5 Balance having a capacity of at least 200 g sensitive and readable to 0.01 gram.
- 2.6 A #200 sieve conforming to AASHTO M 92.
- 2.7 Thermometers, range of 20°F to 200°F.
- 2.8 Stop watch.
- 2.9 An oven capable of maintaining a constant temperature of 140°F ± 5°F.
- 2.10 Asphalt of the grade specified.

3. Procedure:

- 3.1 Obtain a sample of - #200 material weighing at least 10.00 grams from material that has been prepared in accordance with SD 101.
- 3.2 Preheat the water bath to 140°F ± 2°F.
- 3.3 Pour 50 grams of asphalt that has been heated in an oven to 140°F ± 5°F into a glass and add 10.00 grams of the filler.
- 3.4 Place a thermometer in the glass and put the glass in the water bath until the temperature of the asphalt reaches 140°F.
- 3.5 Mix the asphalt and filler with the electric mixer for 5 minutes. Add 50 mL of water at 140°F to the asphalt/filler and mix an additional 5 minutes.
- 3.6 Allow the mixture to stand until the water is clear.

3.7 Visually observe the asphalt free filler that has settled out. Estimate the volume of settled out material compared to the volume of the original 10 grams.

4. Report:

Report the amount of material settled out expressed as a percent of the original sample.

5. References:

AASHTO M 92
SD 101