



**METHOD OF TEST FOR PERFORMING
THE SIEVE TEST ON EMULSIFIED ASPHALTS**

SCOPE

This IM is intended to provide the procedure for determining the amount of asphalt particles larger than the No. 20 (850 μ m) mesh sieve in emulsified asphalt.

APPARATUS

- Sieve, having a 8 in. (200 mm) diameter frame with No. 20 (850 μ m) mesh sieve cloth
- Pan of appropriate size to fit over the bottom of the sieve
- Balance, with at least 1000-gram capacity and accurate to 0.1 gram
- Distilled water (deionized or potable water may be used for Procedure B, but potable water may result in erroneous results.)

PROCEDURE

A. For Lab Use

1. Weigh the sieve and pan to the nearest 0.1 gram.
2. Weigh 1000 grams of emulsion into a suitable container, such as a large beaker.
3. Wet the sieve with distilled water.
4. Pour the 1000 grams of emulsion through the sieve.
5. Wash the container, which held the sample and residue on the sieve with distilled water until the washings run clear.
6. Place the pan under the sieve and heat for 2 hours at a temperature of about 275°F (135°C) in a drying oven.
7. Cool the sieve and pan to room temperature and weigh to the nearest 0.1 gram.

B. For Field Use

If the slightest amount of residue is detected as retained on the sieve, a sample representing this emulsion must be obtained and an official test, according to Procedure A, performed.

1. Weigh the sieve and pan to the nearest 0.1 gram.
2. Weigh 1 quart (950 ml) of emulsion into a suitable container, such a large beaker.
3. Wet the sieve with water.
4. Pour the 1 quart (950 ml) of emulsion through the sieve.
5. Wash the container, which held the sample and residue on the sieve with water until the washings run clear.
6. Visually examine the sieve for residue retained. If no residue is visible, the emulsion is considered to comply with the sieve test requirement.

CALCULATION

1. Calculate the percent of sample retained on the sieve as follows:

$$\% \text{ of Sample Retained} = \frac{B - A}{C} \times 100\%$$

Where: A = Weight of sieve and pan, g
B = Weight of sieve, pan and residue, g
C = Weight of sample from A2, g

DOCUMENTATION

1. The test result is reported to the nearest 0.01%.