METHOD OF TEST FOR EMULSIFIED ASPHALT

Follow AASHTO T 59 in its entirety with the following exceptions:

SAMPLE CONDITIONING FOR TESTING

Add to this section with the following:

The sample containers should be tightly sealed, especially if testing solvent-based emulsions. Open the containers slowly to relieve pressure. Samples of solvent-based emulsions, such as CMS-2s should not be maintained at a temperature of 50ºC (122ºF) for more than three hours.

RESIDUE AND OIL DISTILLATE BY DISTILLATION - PROCEDURE

Add to this section the following:

It may not be possible to determine the volume of the oil distillate to the nearest 1/2 mL due to the lack of a clear line of demarcation between the water, emulsifier and the oil distillate. In this case, seal the graduated cylinder and place it in a freezer at a temperature of –18 ± 3ºC (0 ± 5ºF) until separation between water and oil is established, but no more than three hours. Afterwards, allow the sample to thaw completely in the graduated cylinder and then record the oil distillate volume.

EMULSIFIED ASPHALT RESIDUE BY EVAPORATION - APPARATUS

Replace the beakers and the glass rods in this section with the following:

Containers, 355 mL (12 oz.) covered cylindrical seamless metal containers, with an approximate diameter of 86 mm (3 3/8 in.) and depth of 57 mm (2 1/4 in.).

Glass Rods, with flame-polished ends, having an approximate diameter of 6.4 mm (1/4 in.) and length of 152.4 (6 in.) for use with the 355 mL (12 oz.) metal containers.

RESIDUE BY EVAPORATION - PROCEDURE

Change this section with the following:

Conduct the test with three of the containers as specified under Apparatus. The mass of the assembly will include the cover. The containers shall be loosely covered during the evaporation process to avoid loss of material.

VICOSITY (SAYBOLT FUROL) - APPARATUS
Replace the specification for filter and transfer container with the following:

Filter - An 850 μm (No. 20) sieve of wire cloth, with a diameter of 1 1/2 ± 1/8 in., framed to fit into the top of the viscometer tube.

Sample Transfer Container – Glass, plastic or metal container used to transfer the sample to the viscometer tube.

**VISCOSITY (SAYBOLT FUROL) - PROCEDURE**

Change the procedure for preparing the sample and filling the viscometer with the following:

Test at 50ºC (122ºF) - Heat the emulsion sample in the original container to a temperature not greater than 60ºC (140ºF) in an oven or water bath set at a temperature not exceeding 74 ± 3ºC (165 ± 5ºF). Stir the sample thoroughly without incorporating bubbles. Immediately pour the emulsion through the filter into the viscometer until it is above the overflow rim. At this point, continue with AASHTO T59 in its entirety.

During field testing, the material may be received at a temperature exceeding 60ºC (140ºF). In this case, pour approximately 100 mL into the sample transfer container. Stir the emulsion with a wide circular motion at approximately 60 rpm with a thermometer until a temperature not greater than 60ºC (140ºF) is obtained. Avoid incorporation of bubbles. Immediately pour the emulsion through the filter into the viscometer until it is above the overflow rim. At this point, continue with AASHTO T59 in its entirety.

If sufficient material to fill the viscometer tube will not pass through a single sieve due to excess particulates, the viscosity will be considered unobtainable by this procedure.

**SIEVE TEST - PROCEDURE**

Change the mass of emulsified asphalt required for testing from 1000 g to 500 g.

**SIEVE TEST - CALCULATION**

Change the divisor to 5 in the calculation.