

INTERNATIONAL SLURRY SURFACING ASSOCIATION

TECHNICAL BULLETIN

No. 114

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Test Method for Wet Stripping of Cured Slurry Surfacing Mixtures

1. Scope

1.1 This test method identifies the ability of the cured slurry surfacing mixture to remain coated under the test condition. The Recommended Performance Guidelines for Emulsified Asphalt Slurry Seal and Micro Surfacing, ISSA A105 and A143, provide specific target values for wet stripping results.

2. Referenced Documents

2.1 ISSA Technical Bulletins:

A105 Recommended Performance Guideline for Emulsified Asphalt Slurry Seal A143 Recommended Performance Guideline for Micro Surfacing TB No. 113 Test Method for Determining Mix Time for Slurry Seal and Micro Surfacing Systems

3. Significance

3.1 This test is used to indicate the potential for stripping which may lead to premature raveling.

4. Summary of Method

4.1 A sample of the cured slurry surfacing mixture is placed in boiling water for a period of time and the coating is evaluated.

5. Apparatus

- 5.1 600 ml Pyrex beaker.
- 5.2 Adjustable temperature hot plate or Bunson burner with suitable beaker support.
- 5.3 Fine wire mesh capable of fitting snugly inside the beaker in order to support the sample approximately 1" from the bottom throughout the test.
- 5.4 Balance, capable of weighing 10 grams to within 0.1 gram.
- 5.5 Suitable timer to read minutes and seconds.
- 5.6 White paper towels.

6. Materials

- 6.1 Aggregate shall be representative of the material to be used on the project. Care should be taken to prevent segregation.
- 6.2 Emulsified asphalt shall be representative of the material to be used on the project and should be uniformly mixed. Oversized particles of asphalt shall be removed by pouring the sample through the No. 20 (850 μm) sieve.
- 6.3 Water should be potable.
- 6.4. Mineral fillers and other liquid and/or solid additives shall be representative of the materials to be used on the project. If required, the type and concentration of liquid additives should be recorded.

7. Procedure

- 7.1 10 <u>+</u> 1 grams of cured slurry surfacing mixture is obtained from the ISSA TB No. 113 mix test specimens or prepared according to the procedure outlined in TB No. 113. Samples should be cured at laboratory temperatures for a minimum of 24 hours. NOTE: The specimen may be a single piece or consist of several smaller pieces.
- 7.2 Place the wire mesh screen and 350-450 ml of demineralized or distilled water into the 600 ml beaker.
- 7.3 Bring the water to a vigorous boil.
- 7.4 The mixture is placed into the boiling water.
- 7.5 After 3 minutes, remove the beaker from the heat source and allow to stand for 1-2 minutes.

- 7.6 Flow cold tap water into the beaker until free asphalt on the surface flows over the side. Avoid washing out particles of the slurry mix. Decant the water.
- 7.7
- Remove the mix from the beaker and place on the white paper towel. 7.8
- After air drying for 1-24 hours, the mix shall be examined and an estimate made of the percent 7.9 aggregate coated with asphalt.

8. Report

- 8.1
- Report the percent aggregate coated with asphalt. Greater than 90% retained coating is satisfactory. 75-90% is marginal. Less than 75% is unsatisfactory.