



Designation: ~~D6934 – 08~~ D6934 – 08 (Reapproved 2016)

## Standard Test Method for Residue by Evaporation of Emulsified Asphalt<sup>1</sup>

This standard is issued under the fixed designation D6934; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This test method covers the quantitative determination of residue in emulsified asphalts composed principally of a semisolid or liquid asphaltic base, water, and an emulsifying agent.

1.2 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

### 2. Referenced Documents

2.1 *ASTM Standards:*<sup>2</sup>

[D6997 Test Method for Distillation of Emulsified Asphalt](#)

[E11 Specification for Woven Wire Test Sieve Cloth and Test Sieves](#)

### 3. Significance and Use

3.1 The test may be used to indicate compositional characteristics of emulsified asphalt. Evaporation residue may also be subjected to other characterization tests.

3.2 This test method for residue by evaporation tends to give an asphaltic residue lower in penetration and ductility than the distillation test method ([D6997](#)). Material may be accepted but shall not be rejected as failing to meet specifications containing requirements for determination of residue by distillation, on data obtained by evaporation. If residue from evaporation fails to meet the requirements for properties specified for residue from distillation, tests shall be rerun using the distillation test method.

### 4. Summary of Method

4.1 A sample of emulsified asphalt in an open top beaker is heated in an oven at  $163 \pm 3^\circ\text{C}$  to determine the percentage of asphalt residue. The residue from the evaporation may be tested as required.

### 5. Sample Conditioning for Testing

5.1 All emulsified asphalts shall be properly stirred to achieve homogeneity before testing.

5.2 All emulsified asphalts with viscosity testing requirements of  $50^\circ\text{C}$  shall be heated to  $50 \pm 3^\circ\text{C}$  in the original sample container in a water bath or oven. The container should be vented to relieve pressure. After the sample reaches  $50 \pm 3^\circ\text{C}$ , stir the sample to achieve homogeneity.

5.3 Emulsified asphalts with viscosity testing requirements of  $25^\circ\text{C}$  should be mixed or stirred at  $25 \pm 3^\circ\text{C}$  in the original sample container to achieve homogeneity.

NOTE 1—Emulsified asphalts with viscosity testing requirements of  $25^\circ\text{C}$  may be heated and stirred as specified in [5.2](#) if necessary. In the event the [5.2](#) method is used, the sample should be cooled to  $25 \pm 3^\circ\text{C}$  before testing.

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee [D04](#) on Road and Paving Materials and are the direct responsibility of Subcommittee [D04.42](#) on Emulsified Asphalt Test.

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.