



Designation: D6998 – 19

Standard Practice for Evaluating Aggregate Coating using Emulsified Asphalts¹

This standard is issued under the fixed designation D6998; 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 (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice covers those emulsified asphalts intended for use by mixing with aggregate. It is not applicable to rapid-setting types or diluted materials used for tack coats, priming, or mulch treatments.

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 The text of this standard references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the standard.

1.4 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

D3666 Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
E11 Specification for Woven Wire Test Sieve Cloth and Test Sieves

3. Sample Conditioning for Testing

3.1 All emulsified asphalts shall be properly stirred to achieve homogeneity.

¹ This practice is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.42 on Emulsified Asphalt Test.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

3.2 All emulsified asphalts with viscosity testing requirements of 50 °C shall be conditioned to 50 ± 3 °C in a sample container in a water bath or oven. The container should be vented to relieve pressure. After the sample reaches 50 ± 3 °C, stir the sample to achieve homogeneity.

3.3 Emulsified asphalts with viscosity testing requirements of 25 °C shall be conditioned to 25 ± 3 °C in a sample container to achieve homogeneity. After the sample reaches 25 ± 3 °C, stir the sample to achieve homogeneity.

NOTE 1—Emulsified asphalts with viscosity testing requirements of 25 °C may be heated and stirred as specified in 3.2, if necessary. In the event the 3.2 method is used, the sample should be cooled to 25 ± 3 °C.

4. Significance and Use

4.1 The intent of this practice is to ensure that a given mixing grade emulsified asphalt is stable enough and otherwise possesses the ability to mix with a reference stone for the prescribed time, and coat it uniformly and thoroughly.

NOTE 2—The quality of the results produced by this standard are dependent on the competence of the personnel performing the procedure and the capability, calibration, and maintenance of the equipment used. Agencies that meet the criteria of Specification D3666 are generally considered capable of competent and objective testing, sampling, inspection, etc. Users of this standard are cautioned that compliance with Specification D3666 alone does not completely ensure reliable results. Reliable results depend on many factors; following the suggestions of Specification D3666 or some similar acceptable guideline provides a means of evaluating and controlling some of those factors.

5. Apparatus and Material

5.1 *Sieves*—Standard 19.0-mm and 6.3-mm sieves conforming to Specification E11.

5.2 *Spatula*—A steel spatula or its equivalent, having a blade approximately 200 mm in length.

5.3 *Mixing Container*—A container of approximately 1-L capacity (for example, round-bottom iron dish, kitchen saucepan, pie tin, stainless steel bowl).

5.4 *Stone*—A supply of reference stone (hard limestone, trap rock, or other type) which has been washed with water and dried before using. All stone shall pass through the standard 19.0-mm sieve and not more than 5 % shall pass through the 6.3-mm sieve.

NOTE 3—Each laboratory should select its own reference stone supply.