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Standard Specification for Cutback Asphalt (Medium-Curing Type)¹

This standard is issued under the fixed designation D2027/D2027M; 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.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

- 1.1 This specification covers cutback petroleum asphalts of the medium-curing type for use in the construction and treatment of pavements.
- 1.2 The values stated in SI units or inch-pounds are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of each other. Combining values from the two systems may result in non-conformance with the standard.

2. Referenced Documents

- 2.1 ASTM Standards:²
- D5 Test Method for Penetration of Bituminous Materials
- D95 Test Method for Water in Petroleum Products and Bituminous Materials by Distillation
- D113 Test Method for Ductility of Bituminous Materials
- D140 Practice for Sampling Bituminous Materials
- D402 Test Method for Distillation of Cutback Asphaltic (Bituminous) Products
- D2042 Test Method for Solubility of Asphalt Materials in Trichloroethylene
- D2170 Test Method for Kinematic Viscosity of Asphalts (Bitumens)
- D2171 Test Method for Viscosity of Asphalts by Vacuum Capillary Viscometer
- D3143 Test Method for Flash Point of Cutback Asphalt with Tag Open-Cup Apparatus
- D7553 Test Method for Solubility of Asphalt Materials in N-Propyl Bromide

3. Properties

3.1 The cutback asphalt shall not foam when heated to application temperature and shall conform to the requirements prescribed in Table 1.

4. Test Methods

- 4.1 The materials shall be sampled in accordance with Practice D140, and the properties enumerated in this specification shall be determined in accordance with the following ASTM test methods:
 - 4.1.1 Flash Point (Tag Open-Cup)—Test Method D3143.
 - 4.1.2 Viscosity, Kinematic—Test Method D2170.
 - 4.1.3 *Viscosity, at 60°C* [140°F]—Test Method D2171.
 - 4.1.4 Distillation—Test Method D402.

Note 1—If a 100-mL graduate does not permit sufficiently close readings to determine conformity to this specification with the desired accuracy, receivers graduated with 0.1-mL divisions shall be used.

- 4.1.5 *Penetration*—Test Method D5.
- 4.1.6 *Ductility*—Test Method D113.
- 4.1.7 Solubility in Trichloroethylene—Trichloroethylene/N-Propyl Bromide—Test Method D2042/D7553.

¹ This specification is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.40 on Asphalt Specifications.

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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.