



Designation: D2027/D2027M – 10

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

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.

Current edition approved June 1, 2010. Published June 2010. Originally approved in 1963. Last previous edition approved in 2004 as D2027 – 97 (2004). DOI: 10.1520/D2027-10.

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.

- 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

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*—Test Method D2042.
- 4.1.8 *Water*—Test Method D95.