



Designation: D 3141 – 04

Standard Specification for Asphalt for Undersealing Portland-Cement Concrete Pavements¹

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1. Scope

1.1 This specification covers asphalt suitable for undersealing portland cement concrete and overlaid concrete pavements by pumping hot asphalt under the slabs.

2. Referenced Documents

2.1 *ASTM Standards:*²

- D 5 Test Method for Penetration of Bituminous Materials
- D 6 Test Method for Loss on Heating of Oil and Asphaltic Compounds
- D 36 Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus)
- D 92 Test Method for Flash and Fire Points by Cleveland Open Cup Tester
- D 113 Test Method for Ductility of Bituminous Materials
- D 140 Practice for Sampling Bituminous Materials
- D 312 Specification for Asphalt Used in Roofing
- D 2042 Test Method for Solubility of Asphalt Materials in Trichloroethylene

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.

3. Material

3.1 An asphalt of suitable consistency for pumping when heated to a temperature from 204 to 232°C (400 to 450°F) and for resistance to displacement in the pavement when cooled; for sealing the underside of the slabs and joints, to fill cavities; and to correct vertical alignment by raising the slab.

4. Properties

4.1 The asphalt shall be homogeneous and free of water and shall conform to the requirements in Table 1.

5. Methods of Sampling and Testing

5.1 The asphalt shall be sampled and the properties enumerated in this specification shall be determined in accordance with the following ASTM methods:

- 5.1.1 *Sampling*—Practice D 140.
- 5.1.2 *Softening Point*—Test Method D 36.
- 5.1.3 *Flash Point*—Test Method D 92.
- 5.1.4 *Penetration*—Test Method D 5.
- 5.1.5 *Ductility*—Test Method D 113.
- 5.1.6 *Loss on Heating*—Test Method D 6.
- 5.1.7 *Bitumen Soluble in Trichloroethylene*—Test Method D 2042.

6. Keywords

6.1 asphalt cement; portland-cement concrete; undersealing