



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

This standard is issued under the fixed designation D2026/D2026M; 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 U.S. Department of Defense.

1. Scope

1.1 This specification covers cutback petroleum asphalts of the slow-curing type for use in the construction and treatment of pavements.

1.2 *Units*—The values stated in either SI units or inch-pound units 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 the other. Combining values from the two systems may result in non-conformance with the standard.

2. Referenced Documents

2.1 *ASTM Standards*:²

- D92 Test Method for Flash and Fire Points by Cleveland Open Cup Tester
- 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
- D243 Test Method for Residue of Specified Penetration

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 Jan. 1, 2015. Published January 2015. Originally approved in 1963. Last previous edition approved in 2010 as D2026/D2026M – 97 (2010)^{ε1}. DOI: 10.1520/D2026_D2026M-15.

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.

- D402 Test Method for Distillation of Cutback Asphalt
- D2042 Test Method for Solubility of Asphalt Materials in Trichloroethylene
- D2170 Test Method for Kinematic Viscosity of Asphalts (Bitumens)
- 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 material 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 (Cleveland Open Cup)*—Test Method D92.
- 4.1.2 *Viscosity, Kinematic*—Test Method D2170.
- 4.1.3 *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 in 0.1-mL divisions shall be used.

- 4.1.4 *Asphalt Residue*—Test Method D243.
- 4.1.5 *Ductility*—Test Method D113.
- 4.1.6 *Solubility in Trichloroethylene or N-Propyl Bromide*—Test Method D2042/D7553.
- 4.1.7 *Water*—Test Method D95.



TABLE 1 Requirements for Cutback Asphalt (Slow-Curing Type)

NOTE 1—If the ductility at 25°C [77°F] is less than 100, the material will be acceptable if its ductility at 15°C [59°F] is more than 100.

Designation	SC-70		SC-250		SC-800		SC-3000	
	Min	Max	Min	Max	Min	Max	Min	Max
Kinematic viscosity at 60°C [140°F], mm ² /s	70	140	250	500	800	1600	3000	6000
Flash point (Cleveland open cup), °C [°F]	66 [150]	...	79 [175]	...	93 [200]	...	107 [225]	...
Distillation test:								
Total distillate to 360°C [680°F], volume %	10	30	4	20	2	12	...	5
Solubility, %	99.0	...	99.0	...	99.0	...	99.0	...
Kinematic viscosity on distillation residue at 60°C [140°F], mm ² /s	400	7000	800	10 000	2000	16 000	4000	35000
Asphalt residue:								
Residue of 100 penetration, %	50	...	60	...	70	...	80	...
Ductility of 100 penetration residue at 25°C [77°F], cm	100	...	100	...	100	...	100	...
Water, %	...	0.5	...	0.5	...	0.5	...	0.5

ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org). Permission rights to photocopy the standard may also be secured from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, Tel: (978) 646-2600; <http://www.copyright.com/>