



Standard Test Method for Flash Point of Cutback Asphalt with Tag Open-Cup Apparatus¹

This standard is issued under the fixed designation D3143/D3143M; 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 test method covers the determination of flash points by the Tag Open-Cup Apparatus of cutback asphalts having flash points of less than 93°C [200°F].

NOTE 1—Specifications commonly designate the Cleveland Open Cup (Test Method D92–IP 36) Method for asphalt cements and cutback asphalts having flash points above 79°C [175°F].

NOTE 2—This procedure follows in general the procedure outlined in Test Method D1310, but is restricted to cutback asphalt having flash points of less than 93°C [200°F].

1.2 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.

1.3 **Warning**—Mercury has been designated by the United States Environmental Protection Agency and many state agencies as a hazardous material that can cause central nervous system, kidney and liver damage. Mercury, or its vapor, may be hazardous to health and corrosive to materials. Caution should be taken when handling mercury and mercury containing products. See the applicable Material Safety Data Sheet (MSDS) for details and EPA's website (<http://www.epa.gov/mercury/index.htm>) for additional information. Users should be aware that selling mercury and/or mercury containing products into your state may be prohibited by state law.

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

1.5 *This standard should be used to measure and describe the properties of materials, products, or assemblies in response to heat and flame under controlled laboratory conditions and*

should not be used to describe or appraise the fire hazard or fire risk of materials, products, or assemblies under actual fire conditions. However, results of this test may be used as elements of a fire risk assessment which takes into account all of the factors which are pertinent to an assessment of the fire hazard of a particular end use.

2. Referenced Documents

2.1 ASTM Standards:²

D92 Test Method for Flash and Fire Points by Cleveland Open Cup Tester

D140 Practice for Sampling Bituminous Materials

D1310 Test Method for Flash Point and Fire Point of Liquids by Tag Open-Cup Apparatus

D4057 Practice for Manual Sampling of Petroleum and Petroleum Products

D4177 Practice for Automatic Sampling of Petroleum and Petroleum Products

D6299 Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance

D6300 Practice for Determination of Precision and Bias Data for Use in Test Methods for Petroleum Products and Lubricants

E1 Specification for ASTM Liquid-in-Glass Thermometers

E77 Test Method for Inspection and Verification of Thermometers

E300 Practice for Sampling Industrial Chemicals

E644 Test Methods for Testing Industrial Resistance Thermometers

E1137/E1137M Specification for Industrial Platinum Resistance Thermometers

2.2 IP Standard:

IP 36 Test for Flash and Fire Points by Cleveland Open Cup³

¹ This test method is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is the direct responsibility of Subcommittee D04.47 on Miscellaneous Asphalt Tests.

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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 Available from Energy Institute, 61 New Cavendish St., London, WIG 7AR, U.K., <http://www.energyinst.org.uk>.