



Designation: D97 – 17b (Reapproved 2022)



Designation: 15/22

Standard Test Method for Pour Point of Petroleum Products^{1,2}

This standard is issued under the fixed designation D97; 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 test method covers and is intended for use on any petroleum product.³ A procedure suitable for black specimens, cylinder stock, and nondistillate fuel oil is described in 8.8. The cloud point procedure formerly part of this test method now appears as Test Method **D2500**.

1.2 Currently there is no ASTM test method for automated Test Method D97 pour point measurements.

1.3 Several ASTM test methods offering alternative procedures for determining pour points using automatic apparatus are available. None of them share the same designation number as Test Method D97. When an automatic instrument is used, the ASTM test method designation number specific to the technique shall be reported with the results. A procedure for testing the pour point of crude oils is described in Test Method **D5853**.

1.4 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.5 **WARNING**—Mercury has been designated by many regulatory agencies as a hazardous substance that can cause serious medical issues. Mercury, or its vapor, has been demonstrated to be hazardous to health and corrosive to materials. Use caution when handling mercury and mercury-containing products. See the applicable product Safety Data Sheet (SDS) for additional information. The potential exists that selling

mercury or mercury-containing products, or both, is prohibited by local or national law. Users must determine legality of sales in their location.

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

1.7 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:⁴

- D117** Guide for Sampling, Test Methods, and Specifications for Electrical Insulating Liquids
- D396** Specification for Fuel Oils
- D2500** Test Method for Cloud Point of Petroleum Products and Liquid Fuels
- D5853** Test Method for Pour Point of Crude Oils
- D6300** Practice for Determination of Precision and Bias Data for Use in Test Methods for Petroleum Products, Liquid Fuels, and Lubricants
- D7962** Practice for Determination of Minimum Immersion Depth and Assessment of Temperature Sensor Measurement Drift
- E1** Specification for ASTM Liquid-in-Glass Thermometers
- E644** Test Methods for Testing Industrial Resistance Thermometers
- E1137** Specification for Industrial Platinum Resistance Thermometers
- E2877** Guide for Digital Contact Thermometers

¹ This test method is under the jurisdiction of ASTM International Committee D02 on Petroleum Products, Liquid Fuels, and Lubricants and is the direct responsibility of ASTM Subcommittee D02.07 on Flow Properties. The technically equivalent standard as referenced is under the jurisdiction of the Energy Institute Subcommittee SC-C-4.

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This test method was adopted as a joint ASTM-IP Standard in 1965.

² This test method has been developed through the cooperative effort between ASTM and the Energy Institute, London. ASTM and IP standards were approved by ASTM and EI technical committees as being technically equivalent but that does not imply both standards are identical.

³ Statements defining this test and its significance when applied to electrical insulating oils of mineral origin will be found in Guide **D117**.

⁴ 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.