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Standard Specification for Trinidad Lake Modified Asphalt¹

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1. Scope

1.1 This specification covers Trinidad lake modified asphalt for use in the construction of pavements.

1.2 This specification covers the following penetration grades:

40–55
60–75
80–100
120–150

1.3 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.

1.4 *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.*

2. Referenced Documents

2.1 *ASTM Standards:*²

- D5 Test Method for Penetration of Bituminous Materials
- D92 Test Method for Flash and Fire Points by Cleveland Open Cup Tester
- D113 Test Method for Ductility of Bituminous Materials
- D140 Practice for Sampling Bituminous Materials
- D482 Test Method for Ash from Petroleum Products
- D1754 Test Method for Effects of Heat and Air on Asphaltic Materials (Thin-Film Oven Test)
- D1856 Test Method for Recovery of Asphalt From Solution by Abson Method

¹ This specification is under the jurisdiction of ASTM Committee D04 on Road and Paving Materials and is under 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.

- D2042 Test Method for Solubility of Asphalt Materials in Trichloroethylene
- D2170 Test Method for Kinematic Viscosity of Asphalts (Bitumens)
- D2172 Test Methods for Quantitative Extraction of Bitumen From Bituminous Paving Mixtures

3. Manufacture

3.1 Trinidad lake modified asphalt shall be prepared by blending naturally occurring Trinidad Lake asphalt (TLA) (20 to 50 %) with asphalt cement obtained by the refining of crude petroleum by methods suitable to produce a homogeneous final product. The percentage TLA in the blend shall be clearly stated by the supplier. Fillers other than those from TLA will not be allowed in the asphalt cement blend.

4. Properties

4.1 The blended Trinidad Lake modified asphalt shall be homogeneous as determined by appropriate sampling and testing.

4.2 The various grades of Trinidad Lake modified asphalt shall conform to the requirements prescribed in [Table 1](#).

5. Sampling and Testing

5.1 The material shall be sampled and the properties enumerated in this specification shall be determined in accordance with the following ASTM International standards:

NOTE 1—Local agencies will determine sampling and testing procedures before a contract is awarded. Methods that have been used include sampling at various levels from storage tanks or transports followed by penetration testing or spectroscopic examination of these samples.

- 5.1.1 *Sampling*—Practice [D140](#).
- 5.1.2 *Penetration*—Test Method [D5](#).
- 5.1.3 *Flash Point*—Test Method [D92](#).
- 5.1.4 *Thin-Film Oven Test*—Test Method [D1754](#).
- 5.1.5 *Solubility in Trichloroethylene*—Test Method [D2042](#).
- 5.1.6 *Ductility*—Test Method [D113](#).
- 5.1.7 *Inorganic Material (Ash)*—Test Method [D482](#).
- 5.1.8 *Quantitative Extraction of Bitumen from Bituminous Paving Mixtures*—Test Method [D2172](#).
- 5.1.9 *Recovery of Asphalt from Solution by Abson Method*—Test Method [D1856](#).
- 5.1.10 *Kinematic Viscosity of Asphalt*—Test Method [D2170](#).