



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

2. Referenced Documents

2.1 ASTM Standards:

- D 5 Test Method for Penetration of Bituminous Materials²
- D 92 Test Method for Flash and Fire Points by Cleveland Open Cup³
- D 113 Test Method for Ductility of Bituminous Materials²
- D 140 Practice for Sampling Bituminous Materials²
- D 482 Test Method for Ash from Petroleum Products³
- D 1754 Test Method for Effect of Heat and Air on Asphaltic Materials (Thin-Film Oven Test)²
- D 1856 Test Method for Quantitative Extraction of Bitumen from Bituminous Paving Mixtures²
- D 2042 Test Method for Solubility of Asphalt Materials in Trichloroethylene²
- D 2170 Test Method for Kinematic Viscosity of Asphalt (Bitumens)²
- D 2172 Test Method for Quantitative Extraction of Bitumen from Bituminous Paving Mixtures²

3. Manufacture

3.1 Trinidad modified asphalt shall be prepared by blending

¹ This specification is under the jurisdiction of ASTM Committee D-4 on Road and Paving Materials and is under the direct responsibility of Subcommittee D04.45 on Modified Asphalt Specifications.

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² *Annual Book of ASTM Standards*, Vol 04.03.

³ *Annual Book of ASTM Standards*, Vol 05.01.

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 must 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 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 D 140.
- 5.1.2 *Penetration*—Test Method D 5.
- 5.1.3 *Flash Point*—Test Method D 92.
- 5.1.4 *Thin-Film Oven Test*—Test Method D 1754.
- 5.1.5 *Solubility in Trichloroethylene*—Test Method D 2042.
- 5.1.6 *Ductility*—Test Method D 113.
- 5.1.7 *Inorganic Material (Ash)*—Test Method D 482.
- 5.1.8 *Quantitative Extraction of Bitumen from Bituminous Paving Mixtures*—Test Method D 2172.
- 5.1.9 *Recovery of Asphalt from Solution by Abson Method*—Test Method D 1856.
- 5.1.10 *Kinematic Viscosity of Asphalt*—Test Method D 2170.