

Designation: D 5710 - 03

Standard Specification for Trinidad Lake Modified Asphalt¹

This standard is issued under the fixed designation D 5710; 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 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: ²
- D 5 Test Method for Penetration of Bituminous Materials
- D 92 Test Method for Flash and Fire Points by Cleveland Open Cup
- D 113 Test Method for Ductility of Bituminous Materials
- D 140 Practice for Sampling Bituminous Materials
- D 482 Test Method for Ash from Petroleum Products
- D 1754 Test Method for Effects of Heat and Air on Asphaltic Materials (Thin-Film Oven Test)
- D 1856 Test Method for Recovery of Asphalt From Solution by Abson Method
- D 2042 Test Method for Solubility of Asphalt Materials in Trichloroethylene
- D 2170 Test Method for Kinematic Viscosity of Asphalts (Bitumens)
- D 2172 Test Method 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 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.

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

Current edition approved Dec. 1, 2003. Published January 2004. Originally approved in 1995. Last previous edition approved in 2001 as D 5710–95 (2001).

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.