

Designation: D43 – 00 (Reapproved 2006)

American Association State Highway and Transportation Officials Standard AASHTO No.: M121

Standard Specification for Coal Tar Primer Used in Roofing, Dampproofing, and Waterproofing¹

This standard is issued under the fixed designation D43; 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 Department of Defense.

1. Scope

- 1.1 This specification covers coal tar primer suitable for use with coal tar pitch in roofing, dampproofing, and waterproofing below or above ground level, for application to concrete, masonry, and coal tar surfaces.
- 1.2 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.
- 1.3 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

D140 Practice for Sampling Bituminous Materials

D168 Test Method for Coke Residue of Creosote³

D246 Test Method for Distillation of Creosote and Creosote-Coal Tar Solutions³

 D347 Tables for Volume and Specific Gravity Correction for Creosote, Creosote-Coal Tar Solution, and Coal Tar³
 D367 Test Method for Xylene-Insoluble Matter in Creosote³

D368 Test Method for Specific Gravity of Creosote and Oil-Type Preservatives³

D370 Practice for Dehydration of Oil-Type Preservatives

3. Physical Requirements

3.1 Coal tar primer shall be a distillate of coal-gas tar or coke-oven tar and shall conform to the following requirements:

Water Consistency at 5°C (41°F)	not more than 1 % entirely fluid and crystal free ^A
Specific gravity, 38/15.5°C (100/ 60°F)	not less than 1.06
Matter insoluble in benzene Distillation, based on water-free oil:	not more than 0.5 %
Up to 210°C (410°F)	not more than 1 %
Up to 235°C (455°F)	not more than 10 %
Up to 355°C (670°F)	not less than 65 %
Coke residue	not more than 2 %

^A The coal tar primer shall be rated as crystal free if no crystals are formed when 100 mL of the sample is maintained at a temperature of 5°C (41°F) for 3 h, in a 125 mL Erlenmeyer flask, with occasional stirring.

4. Sampling

4.1 Sample the coal tar primer in accordance with Practice D140.

5. Test Methods

- 5.1 Determine the properties enumerated in this specification in accordance with the following methods:
 - 5.1.1 *Water*—Test Method D370.
 - 5.1.2 Specific Gravity—Test Method D368.
 - 5.1.3 Matter Insoluble in Xylene—Test Method D367.
 - 5.1.4 Distillation—Method D246.
 - 5.1.5 *Coke Residue*—Test Method D168.
- 5.1.6 *Volume and Specific Gravity Correction*—Volume and Specific Gravity Correction Tables D347.

6. Inspection

6.1 Inspection of the material shall be agreed upon between the purchaser and the supplier.

¹ This specification is under the jurisdiction of ASTM Committee D08 on Roofing and Waterproofing and is the direct responsibility of Subcommittee D08.05 on Solvent-Bearing Bituminous Compounds for Roofing and Waterproofing.

Current edition approved Dec. 1, 2006. Published December 2006. Originally approved in 1917. Last previous edition approved in 2000 as D43 – 00. DOI: 10.1520/D0043-00R06.

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 Withdrawn. The last approved version of this historical standard is referenced on www.astm.org.