



Designation: D5727 – 00 (Reapproved 2004)^{e1}

Standard Specification for Emulsified Refined Coal Tar (Mineral Colloid Type)¹

This standard is issued under the fixed designation D5727; 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.

^{e1} NOTE—Editorial changes were made throughout in December 2004.

1. Scope

1.1 This specification covers mineral-colloid-stabilized, concentrated, emulsified, refined coal tar suitable for use as weather-protective and aliphatic-solvent resistant coatings over bituminous pavements, such as those found at airports, parking areas, and driveways. The specification for this material was previously covered by **Federal Specification RP355**.

NOTE 1—Dilute the concentrated emulsion after testing and prior to application to meet the application specification requirements. Application shall be made in accordance with Practice **D3423**.

1.2 The values stated in SI units are to be regarded as the standard. The inch-pound units shown in parentheses are for information only.

1.3 The following precautionary caveat pertains only to the test methods portion, Section 6, of this specification: *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

D95 Test Method for Water in Petroleum Products and Bituminous Materials by Distillation

D140 Practice for Sampling Bituminous Materials

D490 Specification for Road Tar

D2939 Test Methods for Emulsified Bitumens Used as Protective Coatings

¹ This specification is under the jurisdiction of ASTM Committee **D08** on Roofing and Waterproofing and is the direct responsibility of Subcommittee **D08.09** on Bituminous Emulsions.

Current edition approved Dec. 1, 2004. Published December 2004. Originally approved in 1995. Last previous edition approved in 2000 as D5727 – 00. DOI: 10.1520/D5727-00R04E01.

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.

D3423 Practice for Application of Emulsified Coal-Tar Pitch (Mineral Colloid Type)

2.2 Federal Specification:³

Federal Specification RP355

3. Materials and Manufacture

3.1 The emulsion shall be made using tars having viscosities of RT-11 or higher. The tars shall conform to the requirements of Specification **D490**.

3.2 The emulsion shall be fortified with antifreeze when specified.

4. Physical Requirements

4.1 The emulsion shall be homogeneous and exhibit no separation or coagulation of components that cannot be overcome by moderate stirring.

4.2 The material shall conform to the physical properties prescribed in **Table 1**.

5. Sampling

5.1 Sample in accordance with Practice **D140**.

6. Test Methods

6.1 Use Test Methods **D2939** or, as noted:

6.1.1 Uniformity,

6.1.2 Wet film continuity,

6.1.3 Resistance to freezing (when specified),

6.1.4 Density,

6.1.5 Residue by evaporation,

6.1.6 Water content, Test Method **D95**,

6.1.7 Resistance to volatilization,

6.1.8 Solubility of residue in CS₂,

6.1.9 Ash of residue,

6.1.10 Drying time,

6.1.11 Resistance to heat,

6.1.12 Resistance to kerosine,

6.1.13 Resistance to water, and

³ Obsolete. Previously available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.