

Designation: D1227 - 13

Standard Specification for Emulsified Asphalt Used as a Protective Coating for Roofing¹

This standard is issued under the fixed designation D1227; 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 emulsified asphalt suitable for use as a protective coating for built-up roofs and other exposed surfaces with inclines of not less than 4% or 42 mm/m ($\frac{1}{2}$ in./ft).
- 1.2 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

D2939 Test Methods for Emulsified Bitumens Used as Protective Coatings (Withdrawn 2012)³

3. Classification

- 3.1 *Type II*, *Class 1* Emulsified asphalt prepared with mineral colloid emulsifying agents and containing fibers other than asbestos.
- 3.2 *Type II*, *Class* 2— Emulsified asphalt prepared with chemical emulsifying agents and containing fillers or fibers other than asbestos.
- 3.3 Type III, Class 1—Emulsified asphalt prepared with mineral colloid emulsifying agents, without fibrous reinforcement
- 3.4 *Type III*, *Class* 2—Emulsified asphalt prepared with chemical emulsifying agents, without fibrous reinforcement.
- 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 May 1, 2013. Published June 2013. Originally approved in 1952. Last previous edition approved in 2007 as D1227 95 (2007). DOI: 10.1520/D1227-13.
- 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 The last approved version of this historical standard is referenced on www.astm.org.

4. Physical Requirements

- 4.1 The emulsion shall be of suitable consistency for application above freezing, in relatively thick films by brush, mop, or suitable spray equipment without thinning with water or heating, and shall bond to either damp or dry surfaces.
- 4.2 The emulsion shall be of smooth, uniform consistency without separation or settlement in storage to the extent that it cannot be readily dispersed by ordinary stirring.
- 4.3 Type II emulsion, after stirring to homogeneity, shall be suitable for application by brush or mop in single coats of not less than 1.0 L/m² (2½ U.S. gal/100 ft²) without rundown on inclines up to and including vertical.
- 4.4 Type II emulsion, after stirring to homogeneity, shall be suitable for application by proper spray equipment to produce a substantially self-leveling film of not less than 1.0 L/m^2 ($2\frac{1}{2}$ U.S. gal/100 ft²) without rundown on inclines up to and including 50 % or 500 mm/m (6 in./ft).
- 4.5 Type III emulsion, after stirring to homogeneity, shall be suitable for application by brush or proper spray equipment at a rate of not less than 1.0 L/m² (2½ U.S. gal/100 ft²) without rundown on vertical concrete surfaces with open-mesh fabric reinforcement.
- 4.6 The emulsion shall conform to the physical properties prescribed in Table 1.

5. Sampling and Test Methods

5.1 Sample the material and determine compliance with these specifications in accordance with Test Methods D2939.

6. Inspection

6.1 Inspection of the material shall be made as agreed upon between the purchaser and the supplier as part of the purchase contract.

7. Rejection and Rehearing

7.1 If the results of any test do not conform to the requirements of this specification, retesting to determine conformity may be performed as agreed upon between the purchaser and the supplier.