



Standard Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing¹

This standard is issued under the fixed designation D41; 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 reappraisal. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reappraisal.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This specification covers asphaltic primer suitable for use with asphalt in roofing, dampproofing, and waterproofing below or above ground level, for application to concrete, masonry, metal, and asphalt 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

D5 Test Method for Penetration of Bituminous Materials

D88 Test Method for Saybolt Viscosity

D402 Test Method for Distillation of Cutback Asphaltic (Bituminous) Products

D6511 Test Methods for Solvent Bearing Bituminous Compounds

3. Classification

3.1 Type I is characterized as an Asphalt Primer with a generally higher solvent-to-asphalt ratio.

3.2 Type II is characterized as an Asphalt Primer with a lesser solvent-to-asphalt ratio than Type I.

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.

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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.

4. Physical Requirements

4.1 The primer shall conform to the following requirements:

Water, Vol %, max, Type I and Type II	0.5
Saybolt Furol viscosity at 25°C (77°F), Type I	25 to 125 s
Saybolt Furol viscosity at 25°C (77°F), Type II	120 to 800 s
Distillation, volume % of the primer:	
Up to 225°C (437°F), Type I	not less than 35
Up to 360°C (680°F), Type I	not more than 95
Up to 225°C (437°F), Type II	not less than 30
Up to 360°C (680°F), Type II	not more than 60

4.2 The residue obtained from the distillation up to 360°C (680°F) shall conform to the following requirements:

Penetration at 25°C (77°F), 100 g, 5 s	20 to 50
Matter soluble in trichloroethylene	not less than 99 %

5. Sampling

5.1 From each shipment or fraction thereof representing primer of the same kind, select a number of packages at random equivalent to the cube root of the total number of packages in the lot. If the cube root as calculated proves to be a fractional number, it shall be expressed as the next higher whole number. For convenience, the following table is given, showing the number of samples to be selected for shipments of various sizes:

Packages in Shipment	Packages Selected
2 to 8	2
9 to 27	3
28 to 64	4
65 to 125	5
126 to 216	6
217 to 343	7
344 to 512	8
513 to 729	9
730 to 1000	10
1001 to 1331	11

5.2 By means of a paddle, thoroughly stir the contents of each package selected so as to bring all portions thereof into uniform distribution. With an appropriate sampler, immediately draw not less than 450 ml (1 pt) of the primer from the center of each package, and transfer to a clean receptacle of suitable size, which in turn shall be kept tightly covered, prior to and immediately after the samples are being introduced.