



Standard Specification for Coal Tar Roof Cement, Asbestos Containing¹

This standard is issued under the fixed designation D 4022; 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 roof cement suitable for trowel application in coal tar roofing and flashing systems.

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

D 4 Test Method for Bitumen Content

D 95 Test Method for Water in Petroleum Products and Bituminous Materials by Distillation

D 140 Practice for Sampling Bituminous Materials

D 3143 Test Method for Flash Point of Cutback Asphalt with Tag Open-Cup Apparatus³

D 3409 Test Method for Adhesion of Asphalt-Roof Cement to Damp, Wet, or Underwater Surfaces

D 6511 Test Methods for Solvent Bearing Bituminous Compounds

3. Materials and Manufacture

3.1 Coal tar roof cement shall consist of a processed coal tar base, volatile solvents, and mineral fillers including asbestos fibers, mixed to a smooth, uniform consistency suitable for trowel application.

4. Composition

4.1 The composition of coal tar roof cement shall conform to the requirements prescribed in **Table 1**.

5. Performance Requirements

5.1 *Uniformity*—A thoroughly stirred sample shall show no separation of solvent or settling that cannot be overcome by moderate stirring after standing for 72 h at room temperature in a closed container.

5.2 *Workability*—The cement shall be of such a consistency that it will spread readily and permit troweling smooth coatings 1.6 to 3.2 mm ($\frac{1}{16}$ to $\frac{1}{8}$ in.) thick on vertical surfaces.

5.3 *Behavior at 60°C (140°F)*—The cement shall show no evidence of blistering, and the sag or slide shall be no greater than 6 mm ($\frac{1}{4}$ in.).

5.4 *Adhesion to Wet Surfaces*—Minimum average 75 %.

5.5 *Flash Point*—38°C (100°F) minimum.

6. Sampling

6.1 Sample the material from the original container immediately after stirring to a uniform consistency, in accordance with Practice **D 140**.

6.2 Restir samples to obtain uniformity immediately before withdrawing portions for individual tests.

7. Test Methods

7.1 *Water*—Test Method **D 95**.

7.2 *Nonvolatile Matter*—Determine nonvolatile matter in accordance with Test Methods **D 6511**, Section 7 on Nonvolatile Content.

7.3 *Insoluble Matter*—Test Method **D 4**, Procedure No. 2.

7.4 *Behavior at 60°C (140°F)*—Test Methods **D 6511**, Section 12 on Behavior at 60°C (140°F).

7.5 *Adhesion to Wet Surfaces*—Test Method **D 3409**.

7.6 *Flash Point*—Test Method **D 3143**.

8. Inspection

8.1 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.

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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.

³ Withdrawn.



TABLE 1 Composition of Coal Tar Roof Cement

	min	max
Water, volume %	...	1.0
Nonvolatile matter, mass %	65	...
Insoluble matter, mass %	15	40

9. Rejection and Resubmittal

9.1 Failure to conform to any of the requirements prescribed in this specification may constitute grounds for rejection. In the case of rejection, the supplier shall have the right to reinspect the rejected material and resubmit the lot after removal of those packages not conforming to the requirements.

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10. Packaging and Package Marking

10.1 The material shall be suitably packaged to permit acceptance by the carrier and to afford adequate protection from the normal hazards of handling and shipment.

10.2 Each container shall be plainly marked with the ASTM designation, name, brand or trademark of the manufacturer or supplier, the net contents, and wording indicating the material contains asbestos. Applicable government regulations for labeling of combustible liquids shall be followed.

11. Keywords

11.1 asbestos containing; cement; coal tar; roofing