



Standard Specification for Liquid-Applied Neoprene and Chlorosulfonated Polyethylene Used in Roofing and Waterproofing¹

This standard is issued under the fixed designation D 3468; 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.

1. Scope

1.1 This specification covers liquid-applied neoprene and chlorosulfonated polyethylene synthetic rubber solutions suitable for use in roofing and waterproofing.

1.2 The following precautionary caveat pertains only to the test method portion, Section 9, of this specification: *This standard does not purport to address 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:

- D 412 Test Methods for Rubber Properties in Tension²
- D 429 Test Methods for Rubber Property—Adhesion to Rigid Substrates²
- D 471 Test Method for Rubber Property—Effect of Liquids²
- D 711 Test Method for No-Pick-Up Time of Traffic Paint³
- D 823 Practices for Producing Films of Uniform Thickness of Paint, Varnish, and Related Products on Test Panels⁴
- D 1149 Test Method for Rubber Deterioration—Surface Ozone Cracking in a Chamber²
- D 1640 Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature⁴
- D 1644 Test Methods for Nonvolatile Content of Varnishes⁴
- D 1824 Test Method for Apparent Viscosity of Plastisols and Organisols at Low Shear Rates by Brookfield Viscometer⁵
- E 96 Test Methods for Water Vapor Transmission of Materials⁶

2.2 Department of Commerce Voluntary Product Standard:

PS-1 Construction and Industrial Plywood⁷

3. Classification

3.1 *Type I*—Neoprene synthetic rubber solutions for use alone or in combination with chlorosulfonated polyethylene synthetic rubber solutions:

3.1.1 *Grade 1*—Neoprene rubber solution.

3.1.2 *Grade 2*—Fiber-modified neoprene rubber solution.

3.2 *Type II*—Chlorosulfonated polyethylene synthetic rubber solutions.

4. Materials and Manufacture

4.1 The designated polymer shall comprise 100 % of the elastomer and a minimum of 60 % of the nonvolatile content.

4.2 The designated polymer shall be homogeneously compounded with pigments, extenders, stabilizers, antidegradants, and curatives. The product shall be free from graininess, gel particles, and foreign materials.

5. Physical Requirements

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

6. Sampling

6.1 The sample shall be a 1-qt (1-L) aliquot consisting of a composite taken, when possible, from three or more separate containers chosen at random. Samples shall also be taken from any other containers that appear to be nonrepresentative and shall be tested separately. Before a sample is withdrawn, the contents in the container shall be mixed to uniform consistency. The sample shall be placed immediately in an airtight glass jar or metal can until tested.

7. Retest and Rejection

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

8. Specimen Preparation

8.1 Prepare all film specimens in accordance with Method D

¹ This specification is under the jurisdiction of ASTM Committee D-8 on Roofing, Waterproofing, and Bituminous Materials, and is the direct responsibility of Subcommittee D08.18 on Nonbituminous Organic Roof Coverings.

Current edition approved Jan. 10, 1999. Published March 1999. Originally published as D 3468 – 75 T. Last previous edition D 3468 – 90.

² Annual Book of ASTM Standards, Vol 09.01.

³ Annual Book of ASTM Standards, Vol 06.02.

⁴ Annual Book of ASTM Standards, Vol 06.01.

⁵ Annual Book of ASTM Standards, Vol 08.01.

⁶ Annual Book of ASTM Standards, Vol 04.06.

⁷ Available from the Superintendent of Documents, U. S. Government Printing Office, Washington, DC 20402.