



# Standard Specification for Flooding Compounds for Telecommunications Wire and Cable<sup>1</sup>

This standard is issued under the fixed designation D4730; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This specification covers a variety of compounds used for flooding the shields and armors of telecommunications wires and cables (both electrical and fiber optic) for the purpose of preventing water and other undesirable fluids from entering or migrating along or through the cable sheath. (For related standards see Specifications D4731 and D4732.)

## 2. Referenced Documents

### 2.1 ASTM Standards:<sup>2</sup>

D6 Test Method for Loss on Heating of Oil and Asphaltic Compounds

D92 Test Method for Flash and Fire Points by Cleveland Open Cup Tester

D482 Test Method for Ash from Petroleum Products

D1321 Test Method for Needle Penetration of Petroleum Waxes

D3236 Test Method for Apparent Viscosity of Hot Melt Adhesives and Coating Materials

D4565 Test Methods for Physical and Environmental Performance Properties of Insulations and Jackets for Telecommunications Wire and Cable

D4568 Test Methods for Evaluating Compatibility Between Cable Filling and Flooding Compounds And Polyolefin Wire and Cable Materials

D4731 Specification for Hot-Application Filling Compounds for Telecommunications Wire and Cable

D4732 Specification for Cool-Application Filling Compounds for Telecommunications Wire and Cable

E28 Test Methods for Softening Point of Resins Derived from Naval Stores by Ring-and-Ball Apparatus

## 3. Terminology

### 3.1 Definitions of Terms Specific to This Standard:

3.1.1 *flooding compounds*—any of several materials used to fill the air spaces between the sheath elements of single and multi-conductor insulated wires and cables or optical cables for the purpose of excluding water and other undesirable fluids; especially with regard to telecommunications wire and cable, including optical cable, intended for outside aerial or underground installations.

3.1.2 *producer*—the primary manufacturer of the material.

3.1.3 *suppliers*—jobbers and distributors as distinct from producers.

## 4. Ordering Information

4.1 Orders for material under this specification shall include the following information:

4.1.1 Quantity (mass or volume) of each item,

4.1.2 Generic name of the material, such as cable flooding compound,

4.1.3 How furnished (drums or barrels, blocks, etc.),

4.1.4 Certification, if required (see Section 11).

4.1.5 This specification designation, and

4.1.6 Any special requirements, as listed in 8.2 and 9.2, that apply.

## 5. Materials and Manufacture

5.1 The material and manufacturing methods used shall be such that the resulting products will conform to the properties and characteristics prescribed in this specification.

## 6. Compatibility with Other Materials

6.1 It is the responsibility of the purchaser to ensure that the flooding compound ordered is suitable for the intended application and is compatible with any other components that may come into contact with the flooding compound.

6.2 The purchaser shall specify the materials that the compound must be compatible with when tested in accordance with Test Method D4568.

## 7. Chemical Composition

7.1 The chemical composition of these materials is not specified. The material may be of any chemical composition

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee D09 on Electrical and Electronic Insulating Materials and is under the direct responsibility of Subcommittee D09.18 on Solid Insulations, Non-Metallic Shieldings and Coverings for Electrical and Telecommunication Wires and Cables.

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<sup>2</sup> 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.