



Designation: ~~D2921 – 98 (Reapproved 2011)~~ **D2921 – 98 (Reapproved 2017)**

## Standard Test Method for Qualitative Tests for the Presence of Water Repellents and Preservatives in Wood Products<sup>1</sup>

This standard is issued under the fixed designation D2921; 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 test method covers simple qualitative field or laboratory tests to determine water repellency or the presence of chlorinated phenol<sup>2</sup> preservative chemicals in wood products that are specified to be water repellent preservative treated.

1.2 The values stated in SI units are to be regarded as 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.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

### 2. Referenced Documents

2.1 *U.S. Federal Specification:*

**TT-W-572 Wood Preservative Water-Repellant<sup>3</sup>**

2.2 *NIST Standard:*

**262-63 Water Repellent Preservative Non-Pressure Treatment for Mill Work<sup>4</sup>**

### 3. Significance and Use

3.1 Although chlorinated phenol-treated wood has become less common due to environmental concerns, repellent-treated wood is commonly specified in construction. This test method provides a means to verify the presence of a significant level of water repellent protection.

### 4. Apparatus

4.1 *Eyedropper*, plastic squeeze bottle or similar means for metering drops of water.

4.2 *Flame Source*, such as bunsen burner, butane torch, or alcohol burner.

4.3 *Copper Wire Coil Specimen Holder (or Other Suitable Copper Holder)*—A suitable copper wire coil can be made by using a lead pencil as a mandrel to form a helix using copper wire of about 1.6 to 2.4 mm ( $1/16$  to  $3/32$  in.) in diameter. Leave a space of approximately the diameter of the wire between each loop. The helix should be 19 to 25 mm ( $3/4$  to 1 in.) in length. Leave a pigtail of about 152 mm (6 in.) of wire at one end of the helix and form a loop of approximately 25 mm (1 in.) in diameter to be used as a holder for the coil.

4.4 *Sharp Knife.*

<sup>1</sup> This test method is under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.52 on Factory Coated Wood Products.

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<sup>2</sup> Pentachlorophenol, tetrachlorophenol and other chlorinated phenols.

<sup>3</sup> Available from Standardization Documents Order Desk, DODSSP, Bldg. 4, Section D, DLA Document Services, Building 4/D, 700 Robbins Ave., Philadelphia, PA 19111-5098, <http://dodssp.daps.dla.mil>, 19111-5094, <http://quicksearch.dla.mil>.

<sup>4</sup> Available from National Institute of Standards and Technology (NIST), 100 Bureau Dr., Stop 1070, Gaithersburg, MD 20899-1070, <http://www.nist.gov>.