



Designation: D600 – 07 (Reapproved 2012)

Standard Specification for Liquid Paint Driers¹

This standard is issued under the fixed designation D600; 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 liquids for use in paints, varnishes, enamels, and similar organic coatings and are solutions of metallic salts of:

1.1.1 *Class A*—2-Ethyl hexanoic acids in petroleum spirits.

1.1.2 *Class B*—Naphthenic acids in petroleum spirits.

1.1.3 *Class C*—Neodecanoic acids in petroleum spirits.

1.1.4 *Class D*—Tall oil fatty acids in petroleum spirits.

1.1.5 *Class E*—Any of the above acids or acid blends, but containing additives that make the liquid drier water dispersible. Some other driers may also contain complexing agents.

1.1.6 *Class F*—Other acids and acid blends unidentified by their producers.

1.2 The following applies to all specified limits in this standard; for purposes of determining conformance with this standard, an observed value or a calculated value shall be rounded off “to the nearest unit” in the last right-hand digit used in expressing the specification limit in accordance with the rounding-off method of Practice E29.

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.4 For specific hazard information and guidance, see the supplier’s Material Safety Data Sheets for materials listed in this specification.

2. Referenced Documents

2.1 *ASTM Standards*:²

D564 Test Methods for Liquid Paint Driers

D1544 Test Method for Color of Transparent Liquids (Gardner Color Scale)

¹ This specification is under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.35 on Solvents, Plasticizers, and Chemical Intermediates.

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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.

D1545 Test Method for Viscosity of Transparent Liquids by Bubble Time Method

E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

2.2 *U.S. Federal Specification*:

PPP-C-2020 Chemicals, Liquid, Dry, and Paste: Packaging of³

3. Chemical and Physical Requirements

3.1 *Quantitative Requirements*—The drier shall conform to the quantitative requirements as specified in Table 1 for metallic content, color, and viscosity.

3.2 *Physical Appearance*—Each type of drier shall be a mobile liquid free of sediment and suspended matter and shall be stable and miscible with oil as listed in Test Methods D564.

4. Significance and Use

4.1 This specification covers the general requirements for liquid paint driers used in paints, varnishes, enamels, and similar organic coatings.

4.2 The values listed should be considered as general guides to the character of the products, rather than reproducible constants.

5. Test Methods

5.1 The properties enumerated in this specification shall be determined in accordance with Test Methods D564, except as otherwise provided in this specification.

6. Packaging and Package Marking

6.1 Package size shall be agreed upon between the purchaser and the supplier.

6.2 Packaging shall conform to applicable carrier rules and regulations or when specified shall conform to Fed. Spec. PPP-C-2020.

7. Keywords

7.1 liquid paint driers

³ Available from Standardization Documents Order Desk, DODSSP, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5098, <http://www.dodssp.daps.mil>.

*A Summary of Changes section appears at the end of this standard