



Designation: D4302 – 14 (Reapproved 2021)

Standard Specification for Artists' Oil, Resin-Oil, and Alkyd Paints¹

This standard is issued under the fixed designation D4302; 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 establishes requirements for composition, physical properties, performance, and labeling of artists' oil, resin-oil, and alkyd paints.

1.2 This specification covers pigments, vehicles, and additives. Requirements are included for pigment identification, lightfastness, consistency, and drying time.

1.3 Table 1 lists some pigments meeting the lightfastness requirements in this specification. In order to identify other pigments that meet these requirements, instructions are given for test specimen preparation. Test methods for determining relative lightfastness are referenced.

1.4 The values stated in SI units are to be regarded as standard. The values given in parentheses are for information only.

1.5 This pertains only to the test method found in Section 8. *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.6 *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 ASTM Standards:²

D79 Specification for Zinc Oxide Pigments

D185 Test Methods for Coarse Particles in Pigments

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 D01.57 on Artist Paints and Related Materials.

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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.

D387 Test Method for Color and Strength of Chromatic Pigments with a Mechanical Muller

D476 Classification for Dry Pigmentary Titanium Dioxide Products

D602 Specification for Barium Sulfate Pigments

D1133 Test Method for Kauri-Butanol Value of Hydrocarbon Solvents

D1210 Test Method for Fineness of Dispersion of Pigment-Vehicle Systems by Hegman-Type Gage

D1640 Test Methods for Drying, Curing, or Film Formation of Organic Coatings

D1729 Practice for Visual Appraisal of Colors and Color Differences of Diffusely-Illuminated Opaque Materials

D2244 Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates

D2245 Test Method for Identification of Oils and Oil Acids in Solvent-Reducible Paints (Withdrawn 2016)³

D2369 Test Method for Volatile Content of Coatings

D2689 Practices for Testing Alkyd Resins (Withdrawn 2008)³

D4236 Practice for Labeling Art Materials for Chronic Health Hazards

D4303 Test Methods for Lightfastness of Colorants Used in Artists' Materials

D4838 Test Method for Determining the Relative Tinting Strength of Chromatic Paints

D4941 Practice for Preparing Drawdowns of Artists' Paste Paints

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3. Terminology

3.1 Definitions:

3.1.1 *Colour Index Name, n*—consists of the category (type of dye or pigment), general hue, and an assigned number given to a colorant in the Colour Index⁴ as an international identification system.

³ The last approved version of this historical standard is referenced on www.astm.org.

⁴ *Colour Index*, 3rd ed., 5 Vols and Revisions, The Society of Dyers and Colourists, London, 1971–75. Available from the American Association of Textile Chemists and Colorists, P. O. Box 12215, Research Triangle Park, NC 27709.