



Designation: D5098 – 16 (Reapproved 2021)

Standard Specification for Artists' Acrylic Dispersion Paints¹

This standard is issued under the fixed designation D5098; 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' acrylic emulsion paints.

1.2 This specification covers pigments, vehicles, and additives. Requirements are included for pigment identification, lightfastness, bleeding, 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 section found in Sections 6 and 7, and Appendix X2. 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

D185 Test Methods for Coarse Particles in Pigments

D279 Test Methods for Bleeding of 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

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

D3168 Practice for Qualitative Identification of Polymers in Emulsion Paints

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

E284 Terminology of Appearance

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 Index³ as an international identification system.

3.1.1.1 *Discussion*—For example, the Colour Index Name of one phthalocyanine blue pigment is Pigment Blue 15 (PB 15).

3.1.2 *Colour Index Number, n*—a five-digit number given in the Colour Index that describes the chemical constitution of a colorant.

3.1.2.1 *Discussion*—For example, the Colour Index Number of one phthalocyanine blue pigment is 74160.

3.1.3 Appearance terms used in this specification are defined in Terminology E284.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *acrylic emulsion paint, n*—paint containing a stable aqueous dispersion of polymers or copolymers of acrylic acid,

³ *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.