



## Designation: ~~D4941 – 06 (Reapproved 2010)~~ D4941 – 06 (Reapproved 2016)

# Standard Practice for Preparing Drawdowns of Artists' Paste Paints<sup>1</sup>

This standard is issued under the fixed designation D4941; 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 practice covers the production of uniform films of artists' tube paints and other nonflowing pigmented paints using paint applicators designed for less viscous paints.

1.2 Information on how to achieve opaque specimens from these paints is included.

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

1.4 *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.*

## 2. Referenced Documents

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

[D16 Terminology for Paint, Related Coatings, Materials, and Applications](#)

[D4838 Test Method for Determining the Relative Tinting Strength of Chromatic Paints](#)

[E1164 Practice for Obtaining Spectrometric Data for Object-Color Evaluation](#)

## 3. Terminology

3.1 *Definitions*—See Terminology [D16](#) for definitions of terms used in this practice.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *drawdown, n*—a layer of paint deposited on a substrate by use of a drawdown bar for the evaluation of paint characteristics.

3.2.2 *drawdown bar, n*—a metal applicator with a specified gap designed to deposit a wet paint film uniformly on a specified test panel (for example, an opacity chart) or other substrate.

## 4. Summary of Practice

4.1 The paint is spread over the area of the test panel to be covered by the drawdown and the bar is pulled down with pressure just sufficient to avoid lifting of the bar from the chart surface.

4.2 Test panels are allowed to dry in a dust-free environment.

4.3 If complete hiding (opacity) is needed and not produced by a single paint film, a second film is applied at a 90° angle to the first. If required, additional layers may be applied using a narrower drawdown bar.

## 5. Significance and Use

5.1 Quality standards for artists' paints require the evaluation of various appearance characteristics of paint films. Tinting strength determination (Test Method [D4838](#)) specifically requires the preparation of drawdowns for colorimetric measurement. Other evaluations such as color designation, transparency, gloss, and color difference measurements also require drawdown samples.

<sup>1</sup> This practice 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.

Current edition approved ~~Dec. 1, 2010~~ July 1, 2016. Published ~~December 2010~~ July 2016. Originally approved in 1989. Last previous edition approved in ~~2006~~ 2010 as ~~D4941 – 06~~ D4941 – 06 (2010). DOI: ~~10.1520/D4941-06R10~~ 10.1520/D4941-06R16.

<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.