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# Standard Guide for Chemical Analysis of White Pigments<sup>1</sup>

This standard is issued under the fixed designation D 34; 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.

This standard has been approved for use by agencies of the Department of Defense.

### 1. Scope

1.1 This guide covers procedures for the chemical analysis of white pigments.

### 2. Referenced Documents

- 2.1 ASTM Standards:
- C 471M Test Methods for Chemical Analysis of Gypsum and Gypsum Products<sup>2</sup>
- D 715 Test Methods for Analysis of Barium Sulfate Pigment<sup>3</sup>
- D 717 Test Methods for Analysis of Magnesium Silicate Pigment<sup>3</sup>
- D 718 Test Methods for Analysis of Aluminum Silicate Pigment<sup>3</sup>
- D 719 Test Methods for Analysis of Diatomaceous Silica Pigment<sup>3</sup>
- D 1199 Specification for Calcium Carbonate Pigments<sup>3</sup>
- D 1301 Test Methods for Chemical Analysis of White Lead Pigments<sup>3</sup>

D 3280 Test Methods for Analysis of White Zinc Pigments<sup>3</sup>

### 3. Significance and Use

3.1 This compilation of available ASTM methods for the analysis of white pigment serves as a guide to chemists.

#### 4. Test Methods

- 4.1 Tests shall be conducted in accordance with the following ASTM methods. Test procedures not covered by ASTM methods shall be agreed upon by the purchaser and seller.
  - 4.2 Lead Pigments—Test Method D 1301.
  - 4.3 Zinc Pigments—Test Methods D 3280.
  - 4.4 Titanium Dioxide Pigments—Test Methods D 1394.
- 4.5 Calcium Carbonate Pigments: Whiting, Paris White, Spanish White, Chalk—Specification D 1199.
- 4.6 Calcium Sulfate Pigments: Gypsum, Terra Alba, Plaster of Paris—Test Methods C 471M.
- 4.7 Barium Pigments: Barytes or Barite and Blanc Fixe—Test Methods D 715.
  - 4.8 Silica Pigments—Test Methods D 719.
  - 4.9 China Clay—Test Method D 718.
  - 4.10 Magnesium Silicate—Test Methods D 717.
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## 5. Keywords

5.1 chemical analysis; white pigment

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D 1394 Test Methods for Chemical Analysis of White Titanium Pigments<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Annual Book of ASTM Standards, Vol 04.01.

<sup>&</sup>lt;sup>3</sup> Annual Book of ASTM Standards, Vol 06.03.