



## Standard Specification for Chrome Oxide Green Pigment<sup>1</sup>

This standard is issued under the fixed designation D 263; 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 the dry pigment commercially known as chrome oxide green.

### 2. Referenced Documents

#### 2.1 ASTM Standards:

D 126 Test Methods for Analysis of Yellow, Orange, and Green Pigments Containing Lead Chromate and Chromium Oxide Green<sup>2</sup>

D 185 Test Methods for Coarse Particles in Pigments, Pastes, and Paints<sup>2</sup>

D 280 Test Methods for Hygroscopic Moisture (and Other Matter Volatile Under the Test Conditions) in Pigments<sup>2</sup>

### 3. Composition and Properties

3.1 The pigment shall consist of practically pure chromium sesqui-oxide ( $\text{Cr}_2\text{O}_3$ ) without any admixture, and shall conform to the following requirements:

Total chromium (calculated as $\text{Cr}_2\text{O}_3$ ), min, %	97
Total matter soluble in water, max, %	0.5
Moisture and other volatile matter, max, %	0.5
Coarse particles (total residue retained on a No. 325 (45-μm) sieve), max, %	2.0
Organic colors or lakes	none

3.2 The mass color and character of the tint and the tinting

strength formed by a mixture with a white pigment shall be within mutually agreed upon limits of a standard acceptable to both the purchaser and the seller.

### 4. Sampling

4.1 Two samples shall be taken at random from different packages from each lot, batch, day's pack, or other unit of production in a shipment. When no markings distinguishing between units of production appear, samples shall be taken from different packages in the ratio of two samples for each 10 000 lb (4540 kg) except that for shipments of less than 10 000 lb two samples shall be taken. At the option of the purchaser, the samples may be tested separately or after blending in equal quantities the samples from the same production unit to form a composite sample.

### 5. Test Methods

5.1 Tests shall be conducted in accordance with the following methods where applicable. Test procedures not covered by ASTM test methods shall be mutually agreed upon between the purchaser and the seller.

5.2 *Chromium Content*—Test Methods D 126.

5.3 *Total Matter Soluble in Water*—Test Methods D 126.

5.4 *Moisture Content*—Test Method D 280.

5.5 *Coarse Particles*—Test Methods D 185.

5.6 *Organic Colors and Lakes*—Test Methods D 126.

### 6. Keywords

6.1 chrome oxide green; chromium sesqui-oxide; pigment; tint; tinting strength; white pigment

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 06.03.

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