



Standard Specification for Ochre Pigment¹

This standard is issued under the fixed designation D 85; 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 covers ferrous earthy pigment included under the general term “ochre.” The pigment may be purchased in the dry form.

2. Referenced Documents

2.1 ASTM Standards:

- D 50 Test Methods for Chemical Analysis of Yellow, Orange, Red, and Brown Pigments Containing Iron and Manganese²
- D 185 Test Methods for Coarse Particles in Pigments, Pastes, and Paints²
- D 280 Test Methods for Hygroscopic Moisture (and Other Matter Volatile under the Test Conditions) in Pigments²
- D 387 Test Method for Color and Strength of Color Pigments with a Mechanical Muller³
- D 1208 Test Methods for Common Properties of Certain Pigments²

3. Composition and Properties

3.1 The pigment shall be a hydrated oxide of iron permeating a siliceous base and shall be free from added impurities and added coloring matter. The pigment shall conform to the following requirements:

Ferric oxide, min, %	17
Calcium oxide, max, %	5
Lead chromate	none

¹ This specification is under the jurisdiction of ASTM Committee D-1 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D 01.31 on Pigment Specifications.

Current edition approved June 26, 1987. Published August 1987. Originally published as D 85 – 21. Last previous edition D 85 – 81 (1986)^{ε1}.

² *Annual Book of ASTM Standards*, Vol 06.03.

³ *Annual Book of ASTM Standards*, Vol 06.01.

Organic coloring matter	none
Moisture and other volatile matter, max, %	1.0
Coarse particles (total residue retained on a No. 325 (45-μm) sieve), max, %	1.0

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 5 tons (inch-pound or SI), 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 ASTM test methods. Test procedures not covered by ASTM methods shall be mutually agreed upon between the purchaser and the seller.

5.2 *Chemical Analysis of Dry Pigment*— Test Methods D 50.

5.3 *Coarse Particles*—Test Methods D 185.

5.4 *Mass Color and Tinting Strength*— Test Method D 387.

5.5 *Volatile Matter*—Test Methods D 1208.

5.6 *Moisture*—Test Methods D 280.

6. Keywords

6.1 ferrous; hydrated iron oxide; ochre; pigment

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