



Designation: D 607 – 82 (Reapproved 1999)

Standard Specification for Wet Ground Mica Pigments¹

This standard is issued under the fixed designation D 607; 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 two types of finely divided muscovite mica, commercially known as wet ground mica, suitable for use in the manufacture of protective coatings.

2. Referenced Documents

2.1 ASTM Standards:

- D 185 Test Methods for Coarse Particles in Pigments, Pastes, and Paints²
- D 280 Test Methods for Hygroscopic Moisture (and Other Matter Volatile Under Test Conditions) in Pigment²
- D 716 Test Methods for Evaluating Mica Pigment²
- D 1208 Test Methods for Common Properties of Certain Pigments²

3. Composition and Properties

3.1 The pigments shall be made by wet grinding muscovite mica and shall conform to the requirements for properties prescribed as follows:

	Types	
	A Regular 325 M Grade	B Fine Grade
Apparent density, max, lb/ft ³ (g/cm ³)	12.0 (0.2)	12.0 (0.2)
Moisture and other volatile matter, max, weight %	0.5	0.5
Grit, max, weight %	0.5	0.5
Coarse particles, max, weight %:		

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 D01.31 on Pigment Specifications.

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

	Types	
	A Regular 325 M Grade	B Fine Grade
Total residue retained on a No. 140 (106-μm) sieve	0.1	0.01
Total residue retained on a No. 325 (45-μm) sieve	12.0	3.0
Ignition loss, max, weight % (dry basis)	5.0	5.0

3.2 The color 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 appropriate ASTM methods. Test procedures not covered by ASTM methods shall be mutually agreed upon between the purchaser and the seller.

- 5.1.1 *Apparent Density*—Test Method D 716.
- 5.1.2 *Moisture*—Test Method D 280.
- 5.1.3 *Grit*—Test Method D 716.
- 5.1.4 *Coarse Particles*—Test Method D 185.
- 5.1.5 *Ignition Loss*—Test Method D 1208.

6. Keywords

- 6.1 mica; muscovite; wet ground