



# Standard Specification for Wet Ground Mica Pigments<sup>1</sup>

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 ( $\epsilon$ ) 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 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 Paints<sup>2</sup>
- D 280 Test Methods for Hygroscopic Moisture (and Other Matter Volatile Under the Test Conditions) in Pigment<sup>2</sup>
- D 716 Test Methods for Evaluating Mica Pigment<sup>2</sup>
- D 1208 Test Methods for Common Properties of Certain Pigments<sup>2</sup>

## 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 <sup>3</sup> (g/cm <sup>3</sup> )	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 %:		
Total residue retained on a No. 140 (106- $\mu$ m) sieve	0.1	0.01

	Types	
	A Regular 325 M Grade	B Fine Grade
Total residue retained on a No. 325 (45- $\mu$ m) 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 Methods D 716.
- 5.1.2 *Moisture*—Test Methods D 280.
- 5.1.3 *Grit*—Test Methods D 716.
- 5.1.4 *Coarse Particles*—Test Methods D 185.
- 5.1.5 *Ignition Loss*—Test Methods D 1208.


## 6. Keywords

- 6.1 mica; muscovite; wet ground

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee D01 on Paint and Related Coatings, Materials, and Applications and is the direct responsibility of Subcommittee D01.31 on Pigment Specifications.

Current edition approved Oct. 1, 2003. Published October 2003. Originally approved in 1941. Last previous edition approved in 1982 as D 607 – 82 (1999).

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

 **D 607 – 82 (2003)**

*ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.*

*This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.*

*This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or [service@astm.org](mailto:service@astm.org) (e-mail); or through the ASTM website ([www.astm.org](http://www.astm.org)).*