Designation: D210 – 05 (Reapproved 2011)

Standard Specification for Bone Black Pigment[1]

This standard is issued under the fixed designation D210; 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 the pigment commercially known as bone black, ivory black, or drop black. The pigment may be purchased in the dry form or as an aqueous dispersion.

1.2 The values stated in SI units are to be regarded as standard. The values given in parentheses are for information only.

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D185 Test Methods for Coarse Particles in Pigments

D387 Test Method for Color and Strength of Chromatic Pigments with a Mechanical Muller

D1208 Test Methods for Common Properties of Certain Pigments

3. Composition and Properties

3.1 *Dry Pigment*—The pigment shall be made by the calcination of bones, shall be unmixed with any other substance, and shall conform to the following requirements:

Ash (pigment dried at 105°C), %, max	88
Ash insoluble in acids, max, %	3.0
Coarse particles (total residue retained on a No. 325 (45-μm) sieve), max, %	2.0

3.2 *Pigment in Aqueous Dispersion*—The aqueous dispersion shall be made by grinding the specified pigment with water, dispersing agent, biocide, fungicide, pH stabilizer and defoamer using high speed dispersion equipment. The dispersion shall conform to the following requirements:

Pigment, min	38 %
Dispersing agent	14 %
Biocide, max	1 %
Fungicide, max	1 %
pH Stabilizer, max	1 %
Defoamer, max	1 %
Water	44 %

3.3 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 500 lb batch, consisting of one lot. 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 test methods shall be mutually agreed upon by the purchaser and the seller.

5.2 *Coarse Particles*—Test Methods D185.

5.3 *Pigment and Linseed Oil in Paste in Oil*—Test Methods D1208.

5.4 *Mass Color and Tinting Strength*—Test Method D387.

6. Keywords

6.1 black pigment; drop black; ivory black; pigment

[1] 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 June 1, 2011. Published June 2011. Originally approved in 1924. Last previous edition approved in 2005 as D210 – 05. DOI: 10.1520/D0210-05R11.

[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

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