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Standard Specification for COPPER PHTHALOCYANINE BLUE PIGMENT¹

This standard is issued under the fixed designation D 963; 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.

⁶¹ NOTE—Editorial changes were made throughout in April 1986.

1. Scope

1.1 This specification covers copper phthalocyanine blue pigment to be purchased in dry powder form for use in paints, printing ink, and related products. Several types are available, intended for different end uses. The specific end use will determine which of the tests in Section 5 are applicable.

1.2 *This standard may involve hazardous materials, operations, and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

- D 280 Test Methods for Hygroscopic Moisture (and Other Matter Volatile Under the Test Conditions) in Pigments²
- D 281 Test Method for Oil Absorption of Pigments by Spatula Rub-Out²
- D 362 Specification for Industrial Grade Toluene³
- D 387 Test Method for Color and Strength of Color Pigments with a Mechanical Muller²
- D 476 Specification for Titanium Dioxide Pigments²
- D 600 Specification for Liquid Paint Driers³
- D 1135 Methods for Chemical Analysis of Blue Pigments²
- D 1208 Test Methods for Common Properties of Certain Pigments²

3. Composition and Properties

3.1 *Pigment*—The pigment shall consist of the

product known commercially as copper phthalocyanine blue, with or without other ingredients incorporated during manufacture to improve or alter the working properties of the pigment, but free of any other coloring matter, either organic or inorganic. The pigment shall conform to the following requirements:

Moisture and other volatile matter, max, %	3.0
Other coloring matter	none

3.2 *Mass Color and Character of Tint*—The mass color and character of the tint formed by mixture with a white pigment shall be the same as, and the strength not less than, that of a reference sample mutually agreed upon by the purchaser and the seller.

3.3 *Oil Absorption*—The oil absorption shall be between 90 and 110 % of that of a reference sample mutually agreed upon by the purchaser and the seller.

3.4 *Reaction in Identification Tests*—The pigment shall show the same reaction in identification tests (see 5.5 through 5.9) as a reference sample mutually agreed upon by the purchaser and the seller.

3.5 *End Product Dispersion Stability*—When specified, end product dispersion stability, determined as described in 5.10 or by using a mutually agreed upon test, shall be the same as or better than that of a reference pigment sample mutually agreed upon by the purchaser and the seller.

NOTE 1—End product dispersion stability of a

¹ This specification is under the jurisdiction of ASTM Committee D-1 on Paint and Related Coatings and Materials and is the direct responsibility of Subcommittee D01.31 on Pigment Specifications.

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² Annual Book of ASTM Standards, Vol 06.02.

³ Annual Book of ASTM Standards, Vol 06.03.