Downloaded from http://www.everyspec.com

Not Measurement Sensitive
A-A-3108B
October 13, 2004

COMMERCIAL ITEM DESCRIPTION

TINTING MEDIUM, ENAMEL: UNIVERSAL COLORANTS

The General Services Administration has authorized the use of this Commercial item description for all Federal Agencies.

1. **SCOPE.** This commercial item description covers universal tinting medium dispersions and concentrates used primarily for tinting different types of interior and exterior paints.

2. **CLASSIFICATION.** The colors covered by this commercial item description shall be the following:

1a	Carbon Black
2a	Phthalocyanine Blue
3a	Burnt Sienna
3b	Burnt Umber
3c	Raw Sienna
3d	Raw Umber
4b	Phthalocyanine Green
5b	Hansa Orange
6a	Bright Red Iron Oxide
7b	Hansa Yellow

3. **SALIENT CHARACTERISTICS**

3.1 **General properties.** The concentrates and dispersions shall consist of well ground pigments mixed with a suitable liquid solution. The concentrates and dispersions shall be dispersible in both alkyd and water based interior and exterior coatings.

3.1.1 **Stability.** The concentrate, as received, shall show no evidence of settling, gelling, or caking.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: General Services Administration, Federal Supply Service, Heartland Global Supply Center, HGS Engineering and Commodity Management Division, GSA/FSS/6FLEE, 1500 E. Bannister Rd. Bldg #6, Kansas City, MO 34131.

Downloaded from http://www.everyspec.com

3.1.2 **Prohibited materials.** The manufactured shall certify that no mercury, cadmium, hexavalent chromium, or Ozone Depleting Substances (ODSs) are used in the formulation. Except for carbon black, known or suspected human carcinogens, (as defined by the National Toxicology Program's (NTP) Annual Report on Carcinogens), also shall not be used in the formulation. If any of these substances are present as impurities in a raw ingredient, their concentration shall be less than 1.0 percent by weight. The lead content of the nonvolatile portion of the concentrate or dispersion shall not exceed 0.06 percent.

3.1.3 **Condition in container.** The colorant shall be free from seeds and hard settled pigment. It shall be readily dispersible to a uniform condition by five minutes of hand stirring.

3.1.4 **Accelerated storage stability.** When tested as specified in ASTM D 1849, the concentrate shall not be caked, livered, skinned, or show evidence of putrefaction.

3.2 **Special requirements:**

3.2.1 **Color.** The color of the concentrate shall be characteristic of the prime pigment specified in table I.

3.2.2 **Odor.** The odor shall not be obnoxious, disagreeable, or offensive, when tested in accordance with ASTM D 1296.

3.2.3 **Viscosity.** When determined in accordance with ASTM D 562, the viscosity of the tinting medium shall not be greater than 125 Kreb Units (K.U.)

3.2.4 **Flash point.** When tested in accordance with ASTM D 56, the flash point shall not be less than 60°C (141°F).

3.2.5 **Compatibility.** The tinting medium shall mix easily with as oil based alkyd, latex, and a rubber paint in a ratio a 1:50. After the resulting mixtures have stood for five minutes, they shall be applied to glass panels conforming to methods 2021 of FED-STD-141 to a wet film thickness of 51 um (2 mils). While the panels are wet, rub up and area using the index finger in a circular motion for a minimum of 20 revolutions. Exert light pressure of the finger while rubbing so as not to rub-off the film. There shall be no color streaks, pigment floatation, or difference in color, gloss, or texture between the rubbed-up area and the unrubbed-up area. For referee purposes, the paints used shall meet the requirements of MPI-9, MPI-119 and MPI-48.

3.2.6 **Quantitative requirements.** In addition to the above requirements, all concentrates shall meet the quantitative requirements given in table I.

3.2.7 **Tinting strength.** Tinting strength, if specified in the contract or purchase order (see 7.2), shall be equal to a darker than standard specified by the contracting officer.

Downloaded from http://www.everyspec.com

TABLE 1

QUANTITATIVE REQUIREMENTS

Type	Prime pigment	Dry prime pigment content, percent by wt.min.	Percent total pigment by wt. min. 1/	Percent Solids, by wt. min.2/	Grind, Hegman, min. 3/
1a	Carbon black or Lampblack	9	31	47	6.5
2a	Phthalocyanine blue	5.1	40	46	6.5
3a	Burnt Sienna 4/	31	55	65	6.5
3b	Burnt Umber 4/	31	48	57	6.5
3c	Raw Sienna 4/	21	45	55	6.5
3d	Raw Umber	20	45	53	6.5
4b	Phthalocyanine green	6.2	42	54	6.5
5b	Hansa Orange 5/		18	36	6.5
6a	Bright Red Iron Oxide	59	61	70	6.5
7b	Hansa Yellow	12	42	49	6.5

1/ Test Method ASTM D 2698 shall be used for referee testing.
2/ Test Method ASTM D 2369 shall be used for referee testing.
3/ Test Method ASTM D 1210 shall be used for referee testing.
4/ The prime pigment may be a combination of raw umber, iron oxides, and carbon black.
5/ The prime pigment also may be Dinitraniline Orange, PO 5, or Perinone Orange, PO 43.

4. REGULATORY REQUIREMENTS

4.1 **Recovered materials.** The offeror/contractor is encouraged to use recovered materials to the maximum extent practical, in accordance with paragraph 23.403 of the Federal Acquisition regulation (FAR).

4.2 **ODSs.** The tinting concentrates shall not contain any substance listed in 40 CFR part 82, Protection of Stratospheric Ozone.

4.3 **MSDS.** The manufacturer shall comply with requirements set forth by the Hazardous Communication Standard 29 CFR 1910.1200 (d) through (g). All Material Safety Data Sheets (MSDS) submitted must comply with provisions of FED-STD-313.

Downloaded from http://www.everyspec.com

5. QUALITY ASSURANCE PROVISIONS

5.1. **Contractor Quality Assurance.** The contractor shall maintain substantiating evidence that the product offered meets the salient characteristics of this Commercial Item Description and that the product conforms to the producer's own drawing, specifications, standards, and quality assurance practices, and is the same product offered for sale in the commercial marketplace.

The contractor shall provide the required information in a tabulated format and with enough clarity so that the formulation of the tested product can be traced compared to the offered product(s). The contractor shall also provide a summary of performance data, consisting of test reports, substantiating that the product to be supplied under this CID meets the special and quantitative requirements in 3.1 through 3.2.7, and table l, and is the same product offered for sale in the commercial marketplace.

The government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided under the provisions of the contract.

6. PACKAGING

Preservation, Packing and Marking shall be as specified in the contract or order. In addition, each container shall be labeled with the pigment name and the directions for use.

7. NOTES

7.1. **Intended use.** These dispersions and concentrates are intended for tinting both solvent and waterborne paints, enamels, and latexes. Except for Hansa Yellow, all may be used in exterior, as well as, interior paints. Hansa Yellow is only recommended for interior use.

7.2. **Ordering data.**

(a) Title, number, and date of this specification.
(b) Unit quantity required.
(c) Packaging, packing, and marking requirements.
(d) Color based upon pigmentation (see 2).
(e) Tinting strength and Standard color, if specified (see 3.2.7).

Downloaded from http://www.everyspec.com

7.3 **Part Identification Number (PIN).** The following part identification numbering procedure is for government purposes and does not constitute a requirement for the contractor.

AA3108B - 1 A P

SIZE P = PINT, Q = QUART, G = GALLON

TYPE (IA= TYPE IA, 2A = TYPE 2A, 3B = TYPE 3B, ET)

A-A-3108B Commercial Item Description Number

7.4 **Referenced Documents.**

Federal Standards:

FED-STD-141 – Paint, Varnish, Lacquer, and Related Materials; Methods of Inspection, Sampling, and Testing.
FED-STD-313 – Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities.

Master Painters Institute Standard:

MPI-9	Exterior Alkyd, Gloss MPI Gloss Level 6
MPI-119	Exterior Latex, Gloss
MPI-48	Interior Alkyd, Gloss MPI Gloss Level 6

ASTM Standards:

D 56 -	Flash point by Tag Closed Tester
D 562 -	Consistency of Paints Using the Stormer Viscometer
D1210 -	Fineness of Dispersion of Pigment-Vehicle Systems
D1296 -	Odor of Volatile Solvents and Diluents
D1849 -	Package Stability of Paint
D2369 -	Volatile Content of Coatings
D2698 -	Determination of Pigment Content of Solvent-Reducible Paints by High-Speed Centrifuging

7.5 **Source of Documents.**

7.5.1 If there is a need to see paragraph 23.403 of the FAR, contact the contracting officer for a copy.

Downloaded from http://www.everyspec.com

7.5.2 Copies of ASTM specifications and standards may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

7.5.3 Copies of Federal Specifications and Standards may be obtained from the Federal Supply Service Bureau, Specification Section, Suite 8100, 470 East L'Enfant Plaza, SW, Washington, DC 20407

7.5.4 Copies of the Annual Report on Carcinogens may be obtained from the National Toxicology Program, Annual Report on Carcinogens, PO Box 12233, Research Triangle Park, NC 27709.

7.5.6 Copies of the Master Painters Institute Standards for Paint and Coatings may be obtained from The Master Painters Institute, 4090 Graveley Street, Burnaby, BC VSC 3T6. Tele. 604-298-7578 or 1-888-MPI-8937.

MILITARY INTERESTS:

Preparing Activity
GSA-FSS

Custodian
Navy-YD1