A-A-3183
April 4, 2000
SUPERSEDING
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COMMERCIAL ITEM DESCRIPTION

PAINT, LATEX, EXTERIOR, (FOR WOOD AND MASONRY)

The General Services Administration has authorized the use of this commercial item description by all federal agencies.

1. SCOPE. This commercial item description covers a acrylic latex paint for exterior use on primed concrete, masonry, stucco, and wood. It shall conform to the requirements of prohibited materials specified in paragraph 3.1.1.

2. CLASSIFICATION. The paint described shall be of four types.

Type	I	-	Gloss
Type	II	-	Semigloss
Type	III	-	Eggshell
Type	IV	-	Flat

3. SALIENT CHARACTERISTICS.

3.1 General requirements. The paint shall be a one component, ready-to-use, 100 percent acrylic, latex paint. It shall be suitable for application by brush, roller, and spray, to provide a smooth, uniform film, free from lap marks, excessive brush marks, orange peel, craters, sags, or dusting.

3.1.1 Prohibited materials. The manufacturer shall ensure that antimony, mercury, cadmium, hexavalent chromium compounds, compounds containing pyrophosphates, hazardous air pollutants (HAPs), known or suspected human carcinogens, (as defined by the National Toxicology Program's Annual Report on Carcinogens), toxic pollutants, or ozone depleting substances (ODS) are not used in the formulation. If any of these substances, except carcinogens, is present as an impurity, its concentration shall be less than 1.0 percent by weight of the nonvolatile portion of the paint. If a carcinogen is present as an impurity, it's concentration shall be less than 0.1 percent by weight of the nonvolatile portion of the paint. The lead content of the nonvolatile portion of the paint shall not exceed 0.06 percent.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: General Services Administration, Hardware and Appliance Center, Engineering and Commodity Management Div., 1500 E. Bannister Rd., Kansas City, MO 34131.

3.1.2 Condition in container. The coating shall be free from skins, livering, seeds, and hard settled pigment. A gallon container of paint shall be readily mixed to a uniform condition by mechanical shaker in six minutes. A closed, three-quarter filled gallon container of paint shall not skin within 48 hours, when stored at room temperature.

3.2.1 Color. The color of the paint shall be a visual match to the FED-STD-595B color number specified. The ASTM method cited in Table I shall be used as the referee method.

3.2.2 Quantitative requirements. The paint shall meet the requirements listed in table I. Unless otherwise stated in the test method, room temperature and referee conditions for testing shall conform to the requirements of ASTM D 3924.

3.3 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 (MSDSs) submitted shall comply with provisions of FED-STD-313.

TABLE I

REQUIREMENTS

PROPERTY	REQUIREMENT	ASTM TEST METHOD
Prohibited materials		
Lead content, wt. percent of nonvolatile, max	0.06	1/
Other prohibited materials listed in 3.1.1, wt. percent nonvolatiles, max,	1.0	1/
Carcinogenic compounds, wt. percent nonvolatile, max	0.1	1/
Volatile Organic Compound (VOC) content (less water and exempt solvents), g/L (lb./gal), max.	250 (2.09)	2/
Viscosity, K.U.	80-110	D 562
Odor	Not irritating or obnoxious	D 1296
Fineness of grind, min.		
Type I, Gloss	7	D 1210
Type II, Semigloss	6	D 1210
Types III & IV Eggshell and Flat	4	D 1210
Biological growth, min.	8	D 3273, D 3274
Freeze thaw, after 3 cycles		
Difference in viscosity from control specimen, K.U., max	10	D 2243, D 562
Difference from the control specimen	NONE	D 2243
Drying time, hours		
Set to touch, minutes, max. @ room temperature	30	D 1640
Dry to recoat, hours, max. @ room temperature	4	D 1640

TABLE I (Continued)

PROPERTY	REQUIREMENT	ASTM TEST METHOD
Cleaning solution resistance, 4 hours @ 78 deg. C.	3/	D 2248
Hydrocarbon immersion, 4 hours @ 21 deg. C.	4/	D 1308
Water immersion, 4 hours @ 21 deg. F	4/	D 1308
Color	Visual match	D 1729
Gloss (60° specular)		
Type I, Gloss, min.	70	D 523
Type II, Semigloss	35-60	D 523
Type III, Eggshell	11-25	D 523
Type IV Flat, max.	10	D 523
Contrast ratio, @ 75.0 µm ± 2.0 µm (3.0 ± 0.1 mils) wet film thickness.	0.98	D 2805 5/
Sag resistance, min.	10	D 4400
Leveling, min	5	D 4062
Blocking resistance	9	D 4946
Accelerated weathering		
Chalking	None	G 53 6/, D 4214
Difference in gloss, percent, max	10	G 53 6/, D 523
Difference in color		
ΔE for yellow, orange, and red hues	± 2.0	G 53 6/,D 2244
ΔE for other hues	± 1.0	G 53 6/, D 2244
Adhesion	5B	D 3359 7/
Package stability of paint		
Viscosity after storage	70 – 120	D 1849, D 562
Rigidity after storage	10	D 1849, D 869

1/ For referee purposes only. Lead and cadmium content shall be measured in accordance with ASTM D 3335, antimony content in accordance with ASTM D 3717, chromium content in accordance with ASTM D 3718, and mercury content in accordance with ASTM D 3624. Organic solvents shall be identified using FED-STD-141 methods 7356 and 7375.

2/ EPA Reference Method 24 shall be used for determining VOC.

3/ There shall be no blistering, softening, swelling, discoloration, loss of adhesion, or change in gloss or appearance.

4/ Immerse two panels prepared in accordance with FED-STD-141 method 2012, one in a hydrocarbon mixture consisting of 70 percent by volume of iso-octane and 30 percent toluene, and the other in distilled water. The film shall show no blistering or re-emulsification immediately after

the test. After 24 hours recovery, the film shall show no visual change in color or gloss when compared with the untested portion of the enamel.

5/ The paint shall be applied to black and white Leneta chart using a doctor's blade or a bird bar applicator with a 5-mil clearance, for gloss paints and 3 mil clearance for semigloss, eggshell, and flat paints. The reflectance over the white and black areas of the Leneta chart are measured in accordance with ASTM D 2805. The ratio of the reflectance value for the black area to that of the white area is the contrast ratio.

6/ The paint shall be applied, in accordance with the manufacturer's directions, to two, primed pine, or Douglas fir panels, prepared in accordance with ASTM D 358. The primer used shall meet the requirements of A-A-2336A, November 1, 1995. After air drying for 24 hours, a second coat shall be applied crosswise to the first coat. The total dry film thickness (dft) shall be 51 µm ± 4µm (0.002 inch ± 0.0002 inch). There shall be no lifting or any film irregularities during application and after drying. The panels shall be allowed to dry at room temperature for 168 hours prior to testing. Color and gloss shall be measured as described in table I. Expose the panels for 500 hours (16-2/3 cycles) in accordance with ASTM G 53, using UV-A-340 lamp and a cycle of eight hours UV exposure at 60 °C (140 °F) followed by four hours condensation at 50 °C (122 °F). After exposure, condition the panels for two hours at room temperature. Measure the color and gloss as specified in table I. Observe if there is any chalking.

7/ Use test method B. The test panels shall be prepared as described in note four. Use Scotch Brand Tape number 810 or any other cellophane tape with the same adhesive strength.

4. REGULATORY REQUIREMENTS.

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

4.2 Code of Federal Regulations (CFR). The paint shall not contain any substance listed in the following Code of Federal Regulations as a hazardous air pollutant, or ozone depleting substance:

a. 40 CFR part 61.
b. 40 CFR part 401
c. 40 CFR part 82

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 specifications, standards, and quality assurance practices, and is the same formulation as 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 requirements cited under 3.1 through 3.2.2 and is the same formulation as product offered for sale in the commercial marketplace.

The government reserves the right to require proof of conformance to this commercial item description, prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

6. PACKAGING.

Preservation, packing, and marking shall be as specified in the contract or order.

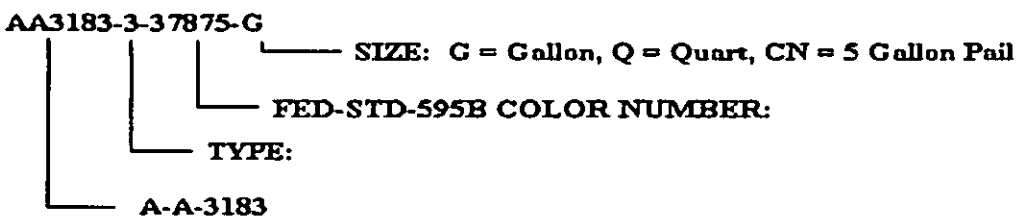
7. NOTES.

7.1 Intended Use. This latex paint is intended for use on exterior primed or previously painted concrete, masonry, stucco and wood. Under normal weather conditions, the paint should last for ten years. Previously painted surfaces should be prepared in accordance with the manufacturer's recommendations, for example, remove loose paint, patch up cracks, wash chalking, etc. New wood should be primed with either an oil-based, epoxy, or latex primer. New concrete, masonry, and stucco should be primed with a high quality latex primer. The paint may also be used on primed metal surfaces, although the surface of the coating will be softer than that usually used for metal.

7.2 Ordering Data. Purchasers should include the following information in the contract or purchase order.

(a) Title, number, and date of this commercial item description
(b) Type and Color
(c) Quantity and size of the container required
(d) Address to whom MSDSs should be sent
(e) Packaging, packing, and marking required
(f) Date of manufacture and reinspection.

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.



7.4 Referenced documents. The following documents of the issue on the date of invitation for bids or request for proposal, form a part of this commercial item description to the extent specified herein.

Federal Specifications

A-A-2336 - Primer Coating (Alkyd, Exterior Wood, White and Tints).

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.

FED-STD-595 - Colors Used in Government Procurement.

Environmental Protection Agency

EPA Reference Method 24 - Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Paint, Varnish, Lacquer, or Related Surface Coatings

National Toxicology Program

Annual Report on Carcinogens.

ASTM Standards:

D 358 - Wood to Be Used as Panels in Weathering Tests of Coatings
D 523 - Specular Gloss.
D 562 - Consistency of Paints Using the Stormer Viscometer.
D 869 - Evaluating Degree of Settling of Paint.
D 1210 - Fineness of Dispersion of Pigment-Vehicle Systems by Hegman-Type Gage
D 1296 - Odor of Volatile Solvents and Diluents.
D 1308 - Effect of Household Chemicals on Clear and Pigmented Organic finishes.
D 1640 - Drying, Curing, or Film Formation of Organic Coatings at Room Temperature.
D 1729 - Visual Evaluation of Color Difference of Opaque Materials.
D 1849 - Package Stability of Paint.
D 2243 - Freeze-Thaw Resistance of Water-Borne Coatings
D 2244 - Calculation of Color Differences from Instrumentally Measured Color Coordinates
D 2248 - Detergent Resistance of Organic Finishes
D 2805 - Hiding Power of Paints by Reflectometry

D 3273 - Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber
D 3274 - Evaluating Degree of Surface Disfigurement of Paint Films by Microbial (Fungal or Algal) Growth or Soil and Dirt Accumulation
D 3335 - Low Concentrations of Lead, Cadmium, and Cobalt in Paint by Atomic Absorption Spectroscopy.
D 3359 - Measuring Adhesion by Tape Test.
D 3624 - Low Concentrations of Mercury in Paint by Atomic Absorption Spectroscopy.
D 3717 - Low Concentrations of Antimony in Paint by Atomic Absorption Spectroscopy
D 3718 - Low Concentrations of Chromium in Paint by Atomic Absorption Spectroscopy.
D 3924 - Standard Environment for Conditioning and Testing Paint, Varnish, Lacquers, and Related Materials.
D 4062 - Leveling of Paints by Draw-Down Method.
D 4214 - Evaluating the Degree of Chalking of Exterior Paint Films.
D 4400 - Sag Resistance of Paints Using a Multinotch Applicator.
D 4946 - Block Resistance of Architectural Paints.
G 53 - Operating Light-and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials.

7.5 Source of Documents.

7.5.1 Contact the contracting officer for a copy of paragraph 23.403 of the FAR, and the appropriate paragraphs in 29 and 40 CFR.

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.

MILITARY INTERESTS:

Military Coordinating Activity:
Navy – YD2

Custodian
Air Force - 99
Navy – YD1

Review Activities
Army - MI, MR, MD
Air Force - 84, 11

User Activities
Army - GL, CE
Navy - OS, YD1
Marine Corp - MC

CIVIL AGENCY COORDINATING ACTIVITY:

Preparing Activity:

GSA-FSS