METRIC
A-A-2246B
February 25, 1997
SUPERSEDING
A-A-2246A
December 31, 1996

COMMERCIAL ITEM DESCRIPTION

PAINT, LATEX

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

1. SCOPE. This specification covers a ready-mixed, latex-base paint for interior walls and ceilings. This specification provides two types of paint in high, medium, low, and flat gloss finishes.

2. CLASSIFICATION. The paint shall be of the following types and classes

Type I - Tints (pastel) and whites
- Class 1 - high gloss
- Class 2 - medium gloss
- Class 3 - low gloss
- Class 4 - flat gloss

Type II - A high-hiding white (no color number), suitable for use as is or as a tint-base
- Class 1 - high gloss
- Class 2 - medium gloss
- Class 3 - low gloss
- Class 4 - flat gloss

3. SALIENT CHARACTERISTICS

3.1 Condition in Container. The paint, as received, shall be ready-to-use and shall show no evidence of biological growth, livering, skinning, putrefaction, corrosion of the container, or hard settling of the pigment. Any settled pigment shall be dispersible by hand stirring to a smooth uniform condition free from persistent foam (FED-STD-141, Method 3011).

3.2 Working Properties. The paint shall apply smoothly by brush, roller, or spray equipment and shall dry to a smooth, uniform film free from pinholes, craters, dusting, sagging, streaking, shiners, flashing, separation of the components, or excessive brush marks.

3.3 Prohibited Materials. The paint shall not contain benzene, chlorinated solvents or ethylene-based glycol ethers and their acetates, and mercury and hexavalent chromium compounds shall not be detected. Lead content shall not exceed 0.06 percent of the nonvolatile content.

3.4 Color. The Type I paint shall match the specified color within a ΔE of 1.0 (ASTM D 1729).

3.5 Odor. The odor of the paint shall not be putrid or otherwise offensive or irritating before, during, and after application when tested as in ASTM D 1296 using mineral spirits as a reference. There shall be no residual odor after 24 hours of drying.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: Paints and Chemicals Center 400 15th St. SW (10FTE) Auburn, WA 98001.

FSC 8010

3.6 Resistance to biological growth. The paint film shall have a surface disfigurement rating of 8 or greater when tested in accordance with ASTM D 3273/3274.

3.7 Water/Alkali resistance. The film shall show no wrinkling, re-emulsification, or change in hue, lightness, or 60° specular gloss when tested as specified in ASTM D 1308, 7.2, using water and a 0.5% NaOH alkali solution. The time interval shall be 4 hours with an additional 2 hours allowed for recovery. The panels shall be glass prepared in accordance with method 2021 of FED-STD-141. Apply the paint to a dry film thickness of 75 microns (3 mils) and allow to air dry at standard conditions for 120 hours.

3.8 Flexibility. The paint shall bend over mandrel without cracking, chipping, or flaking when tested in accordance with ASTM D 522, method B. The mandrel shall be 6.35 mm (1/4 inch) for class 1, and 3.18 mm (1/8 inch)for classes 2,3, and 4. The panels shall be shall be prepared in accordance with method 2012 of FED-STD-141. Apply the paint to a dry film thickness of 25 microns (1 mil) and air dry for 18 hours at standard conditions, then bake for 3 hours at 105 ± 2°C. Cool for 1/2 hour before performing test.

3.9 Accelerated storage stability. After storage at 49°C (120°F) for 30 days as specified in ASTM D 1849, the paint shall show no livering, curdling, hard caking, or gummy sediment. It shall mix by stirring with a spatula to a smooth and homogeneous consistency within 5 minutes.

3.10 Adhesion. Using the panel from 3.8, a film of the paint tested as in ASTM D 3359 Method B shall achieve a rating of 3B to 5B.

3.11 Self lifting properties. The paint shall produce no lifting, softening, or other film irregularities upon recoating a previously painted surface.

3.12 Washability. When tested as in ASTM D 3450, the soiling mixture shall be substantially removed without any exposure of the undercoat. The reflectance of the cleaned area shall be not less than 90% of the original value for class 1 and 2, and not less than 95% of the original value for class 3 and 4. The 60° specular gloss shall not be less than 80 percent nor more than 120 percent of the original value for classes1, 2, and 3. The 60° specular gloss shall not change more than 5 percentage points from the original value for class 4. (i.e. class 4 gloss = 10, after washability test may not be more than 15)

Quantitative Requirements	**Limits**	**ASTM Reference**
Consistency, KU	82-110	D 562
Nonvolatile, percent by volume of paint	40 min.	D 2697
Dry Time (hours)		D 1640
Set to touch	1/2 max.	
Dry hard	4 max.	
60° Specular Gloss		D 523
Class 1	85% min.	
Class 2	45-60%	
Class 3	15-30%	
Class 4	5-15%	
Fineness of Grind		D 1210
Class 1	6 min.	
Class 2	4 min.	
Class 3	4 min.	
Class 4	3 min.	
Yellowness index difference (after accelerated yellowing), (type 1, color 37875 and type II)	0.07 max.	FED-STD-141 6132

Opacity [11 m^2/L (450 ft^2/gal)]		D 2805
80 and above	0.95 min.	
79-76	0.96 min.	
75-72	0.97 min.	
71-68	0.98 min.	
67 and below	0.99 min.	
Directional Reflectance (Type II)	85 min.	E 1347
Volatile organic content (VOC) g/l (lb/gal)	250 (1.25) max.	D 3960
Scrub Resistance, cycles		D 2486
Class 1, 2	400	
Class 3,4	150	
Freeze-thaw resistance, viscosity change, KU (3 cycles)	5 max.	D 2243

4. REGULATORY REQUIREMENTS

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

5. QUALITY ASSURANCE PROVISIONS

5.1 Contractor Certification. The contractor shall certify and 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 drawings specifications, standards, and quality assurance practices. The government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

6. PACKAGING

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

7. NOTES

7.1 Part Identification Number (PIN). The following part identification numbering procedure is for government purposes and does not constitute a requirement for the contractor. The PIN used for units acquired to this description will be assigned as follows:

AA2246 - X - XXXXX

- XXXXX — FED-STD-595 color number
- X — Size: Q = 1 quart pail; G = 1 gallon pail; P = 5 gallon pail; D = 55 gallon drum
- AA2246 — Commercial Item Description Number

7.2 Ordering data. Acquisition documents should specify the following:

a. Title, number, and date of this commercial item description
b. Type and Class required
c. Color required (Type I only)
d. Packaging, packing, and marking required.

7.3 ASTM standards are available from the American Society for testing and Materials, 100 Barr Harbor Dr., West Conshohocken, PA 19428-2959. The issues of the ASTM standards in effect on the date of the solicitation shall be used to determine compliance with these requirements.

7.4 FED-STD-595 color numbers beginning with 1 shall be used for class 1, color numbers beginning with 2 shall be used for class 2, and color numbs beginning with 3 shall be used for classes 3 and 4. The color chips are only to be used for color match, the gloss levels shall be matched using the above listed numeric values.

MILITARY INTERESTS:

Custodian:
Navy - YD1
Air Force - 99

Reviewer:
Air Force - 84
Army - USACERL

PREPARING ACTIVITY:
GSA-FSS