[METRIC]
A-A-2962
December 22, 1995

COMMERCIAL ITEM DESCRIPTION

ENAMEL, ALKYD

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

1. SCOPE. This Commercial Item Description covers two types, two classes and three grades of air drying alkyd enamel for use as a finishing coat on primed exterior or interior metal or wood surfaces. The enamel is lead and chromate free and is available at two levels of volatile organic compound (VOC) content and at three gloss levels.

2. CLASSIFICATION. The enamel covered by this description shall be of the following types, classes and grades, as specified:

Type I - Bulk
Type II - Aerosol

Class A - Maximum VOC 420 g/L (Type I); 82% (Type II)
Class B - Maximum VOC 340 g/L (Type I); 65% (Type II)

Grade A - Flat, 60° Specular Gloss of not over 4
Grade B - Semigloss, 60° Specular Gloss of greater than 15 but not over 25
Grade C - Gloss, 20° Specular Gloss of greater than 70

3. SALIENT CHARACTERISTICS

3.1 Quantitative Requirements. See Table I

3.2 Prohibited Material. The manufacturer shall certify that the product does not contain mercury, chlorinated solvents, hydrolyzable chlorine derivatives, any EPA Class I or II ozone depleting compound, ethylene based glycol ethers or their acetates, lead, nor any carcinogen, as defined in 29 CFR 1910.1200.

3.3 Application properties. The Type I enamel shall be capable of being easily applied by brush, roller or spray to produce a smooth, uniform film, free from running, sagging, streaking, gloss variation or orange peel. The Type II, aerosol, shall be dispersible by hand shaking for 1 minute at room temperature. The valve shall operate with moderate finger pressure and close immediately upon release of pressure without sputtering, producing a uniform and smooth film. The can shall deliver a minimum of 98% by weight of the contents. The dried film shall show no dusting, mottling, color separation, flooding, floating or wrinkling

3.4 Color match. The color of the paint shall match the Fed Std 595 color chip specified in the contract or purchase order when applied to a black and white hiding chart until complete hiding is obtained, and tested in accordance with ASTM D 1729. Black may be darker or jetter than the actual color chip

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to General Services Administration, Engineering and Commodity Management Division (10FTE), 400 15th St. SW, Auburn, WA 98001

TABLE I

Manufacturers may use tests shown in this table or an equivalent test to verify compliance with the requirement. The tests listed below will be used in case of dispute.

Characteristic	Minimum	Maximum	Test
Volatile Organic Content (VOC)			ASTM D 3960
Type I, Class A	—	420 g/L	
Type I, Class B	—	340 g/L	
Type II, Class A	—	82%	
Type II, Class B	—	65%	
Total solids (Type II) in a 473 mL can	57 grams	—	Note 1
Specular Gloss, Class A, 60°	—	4	ASTM D 523
Class B, 60°	15	25	
Class C, 20°	70	—	
Dry time, Type I			ASTM 1640 using a 50.8 µm film applicator on a glass panel
Set to touch	—	2 hrs	
Dry hard	—	8 hrs	
Dry through	—	48 hrs	
Type II,			
Set to touch	—	30 min	
Dry through	—	18 hrs	
Water resistance, immersion procedure	18 hours	—	ASTM D 1308
Hydrocarbon resistance, immersion procedure 70% iso-octane, 30% toluene	4 hours	—	ASTM D 1308
Accelerated weathering alternate 8 hrs UV@60°C/4 hrs con@50°C	200 hours	—	ASTM G 53, UV-A-351/302 lamps
Grind, Class A	5	—	ASTM D 1210
Class B	6	—	
Class C	7	—	

Note 1. Total solids (Type II). Weigh a full container and carefully puncture the top of the can (the container may be cooled to lower pressure) and allow the gas to escape. Cut the top open, equilibrate to room temperature and stir to allow all propellants to escape. Transfer contents to a tared container (capable of being sealed). Wash the can, agitator and top with solvent. Dry the can, agitator and top and reweigh to determine the net contents. Determine total solids percentage of the container contents in accordance with ASTM D 2369.

3.5 Contrast Ratio. Prepare a drawdown of the enamel using a 50.8 µm film applicator and air dry for 24 hours (for Type II, use container contents from total solids test in Note 1, above). When tested in accordance with ASTM D 2805 the paint shall comply with Table II, below.

TABLE II

Manufacturers may use an equivalent test to verify compliance with the requirement. ASTM D 2805 will be used in case of dispute

Color	Minimum Contrast Ratio
orange,12199; yellow, 13655,23538,33538	0.88
red, 21136, ,31136; orange,32246	0.90
orange,12197; yellow, 13538; red,11105,11136,11140	0.92
white,17925	0.94
All others	0.98

3.6 Flexibility. Prepare a drawdown using a 50.8 µm film applicator on a cleaned steel tinplated panel. Air dry two days, then dry 24 hours at 60°C. Bend Grade A and B over a 6.4 mm mandrel, and Grade C over a 3.2 mm mandrel. in accordance with ASTM D 522 Method B. The enamel shall be rated as "pass".

4. QUALITY ASSURANCE PROVISIONS.

4.1 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.

4.2 Test report. When specified in the solicitation, the offeror shall submit a third party test report verifying compliance to specification requirements from a laboratory approved by the Government.

5. PACKAGING.
The packaging and packing shall be as specified in the contract or order.

6. NOTES

6.1 Intended use. This enamel is for use on properly cleaned, pretreated and primed exterior and interior metal or wood surfaces. Due to VOC restrictions, the users should consult their local regulations before using Class A. The following classes and grades may be used as the direct replacements for these Federal Specifications:

TT-E-527	Class A, Grade A
TT-E-529	Class A, Grade B
TT-E-489	Class A, Grade C

6.2 Referenced documents.

Federal Standards:

Fed. Std. 595 - Colors Used in Government Procurement

Federal specifications and standards may be obtained from Federal Supply Service Bureau (3FBP-W), Suite 8100, 470 East L'Enfant Plaza SW, Washington, DC 20407.

Federal Regulations.

29 CFR Part 1910.1200

The Code of Federal Regulations (CFR) is for sale mail order by the Superintendent of Documents, ATTN: New Order, PO Box 371954, Pittsburgh, PA 15250-7954. When indicated, reprints of certain regulations may be obtained from the federal agency responsible for issuance thereof. Charge orders may be telephoned to the Government Printing Office order desk at (202-512-1800).

ASTM Methods:

ASTM D 522 - Mandrel Bend Test of Attached Organic Coatings
ASTM D 523 - Specular Gloss
ASTM D 1210 - Fineness of Dispersion of Pigment-Vehicle Systems
ASTM D 1308 - Effect of Household Chemicals on Clear and Pigmented Organic Finishes.
ASTM D 1729 - Visual Evaluation of Color Differences of Opaque Materials
ASTM D 1640 - Drying, Curing, or Film Formation of Organic Coatings at Room Temperature
ASTM D 2369 - Volatile Content of Coatings
ASTM D-2805 - Hiding Power of Paints by Reflectometry
ASTM D 3960 - Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings
ASTM G 53 - Operating Light and Water Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials

ASTM standards are available from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshocken, PA 19428-2959. The issue of the ASTM test methods in effect on the date of the solicitation shall be used to determine compliance with these requirements.

6.3 Ordering data. Purchaser should specify the following when ordering:

- Type, Class, and Grade
- Color Number
- Size
- If third part test report is required (see 4.2)

6.4 Suggested Sources. The following manufacturer's have furnished test reports that indicate the listed products meet the requirements of this Commercial Item Description. This list is not intended to imply that other products may not also meet these requirements. Those persons interested in adding their product to this list, or in obtaining information on changes to this list, may contact the Preparing Activity at the address listed on page 1.

Type I, Class A			
Manufacturer	**Part Number**	**Manufacturer**	**Part Number**
Davlin Paint 700 Allston Way Berkeley, CA 94710	B489 series (Grade C only)	Pratt and Lambert PO Box 2153 Wichita, KS 67201	771 series 774 series 775 series
Devoe & Raynolds Co. 1437 Portland Ave Louisville, KY 40203	A6010 (Grade C only)	Randolph Products Park Place East Carlstadt, NJ 07072	E-6234, E-6235, E 6517 E-7948, E-8952, E-8559 E-9090, E-9091 (Grades A & B only)
Hentzen Coatings 6937 West Mill Road Milwaukee, WI 53218-1225	09891WBF series (Grade C, only)	The Sherwin-Williams Co. d.b.a. Con-Lux Coatings 226 Talmadge Road Edison, NJ 08818-0847	91,92,93 series (Grades B & C only)
Kop-Coat, Inc 5431 District Blvd Commerce, CA	A-9005 series (Grade C only)	The Sherwin-Williams Co 2902 West Miller Road Garland, TX 75041	B54WZ1004 (Grade C only)
Niles Chemical Paint 225 Fort Street Niles, MI 49120	N-5000 series (Grade C only)	Spraylat-Everseal 1701 E. 122nd Street Chicago, IL 60633	HS-489 series (Grade C only)
PPG Architectural Finishes One PPG Place Pittsburgh, PA 15272	UC65064 (Grade C, only)		

PREPARING ACTIVITY
GSA-FSS