

COMMERCIAL ITEM DESCRIPTION

THINNER: FOR PHENOL-FORMALDEHYDE AND MEDIUM OIL AND STYRENATED ALKYD PAINTS AND VARNISHES

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

1. **SCOPE.** This commercial item description covers paint thinners intended for reducing the viscosity of styrenated alkyd enamels and medium and long oil alkyd enamels. The thinner is also intended for reducing phenol-formaldehyde spar varnishes.

2. SALIENT CHARACTERISTICS.

2.1 **General requirements.** The paint thinner shall be free of haze, rust particles and suspended matter.

2.2 **Prohibited ingredients.** The manufacturer shall insure that:

- a. No halogenated compounds or hydrolyzable halogen derivatives, benzene, toluene, xylene (all isomers), ethylbenzene, methyl ethyl ketone and branched chain ketones, methyl isobutyl ketone, and Ozone Depleting Substances (ODS) are used in the formulation.
- b. Except for aromatic compounds, the thinner contains less than 0.1 percent of the substances in 2.2.a above, as impurities.
- c. The thinner contains less than 1.0 percent of aromatic compounds, as impurities.
- d. The thinner shall not be considered photochemically reactive as defined by the South Coast Air Quality Management District (SCAQMD) Rule 102.

2.3 **Miscibility and compatibility.** One to one mixtures of this thinner with phenol formaldehyde spar varnishes, medium oil alkyd paints and varnishes, and styrenated alkyd paints and varnishes shall remain stable and uniform after 24 hours. There shall be no precipitation, curdling, or separation. A slight pigment settling is permitted. The reduced paint mixtures shall then be applied to clear plate glass with a 0.0005 inch film applicator. While the film is wet and after drying, there shall be no seeding or other evidence of incompatibility, when examined by transmitted light.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: General Services Administration, Paints and Chemicals Commodity Center, Engineering and Commodity Management Division (9FTE-10), 400 15th St. SW, Auburn, WA. 98001.

2.3.1 **Referee testing for miscibility and compatibility.** The paints and varnishes used for the referee tests shall be:

- a. A medium oil alkyd paint meeting the requirements of TT-E-515.
- b. A styrenated alkyd paint meeting the requirements of TT-E-516.
- c. A phenol formaldehyde spar varnish meeting the requirements of TT-V-119.

2.4 **Quantitative requirements.** The paint thinner shall meet the requirements listed in table I.

TABLE I
REQUIREMENTS

PROPERTY	REQUIREMENT	ASTM TEST METHOD
Total Nonvolatile Matter, in mg per 100 mL, max.	10	D 1353
Spot test, discoloration and oiliness	None	4491 1/
Copper Corrosion	1A	D 130 2/
Color, Saybolt, min.	25	D 156
Flash Point, °C, Min	10 °C (50 °F)	D 56
Acidity, (as acetic acid), wt. percent, max.)	0.01	D 1613
Heptane miscibility, use 95 mL of heptane	No turbidity	D 1476
Odor	Not obnoxious	D 1296
Relative evaporation rate, (90 percent, relative to n-butyl-acetate), max.	1.5	D 3539

1/ FED-STD-141

2/ Use Test Method A.

3. REGULATORY REQUIREMENTS.

3.1 **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.

3.2 **Code of Federal Regulations (CFR).** The primer coatings 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 through 63.
- b. 40 CFR part 82

3.3 **MSDS.** The manufacturer shall submit a Material Safety Data Sheets (MSDSs) that complies with the provisions of FED-STD-313.

4. QUALITY ASSURANCE PROVISIONS.

4.1 **Product conformance.** The contractor shall maintain substantiating evidence that the product offered meet 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.

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 ASTM documents cited under 2.1 - 2.4.

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.

5. PACKAGING.

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

6. NOTES.

6.1 **Intended use.** This thinner is primarily intended for reducing the viscosity of medium oil and styrenated alkyd resin enamels. It can also be used with phenol formaldehyde spar varnishes.

6.2 **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) Quantity and size of the container required
- (c) Address to whom MSDSs should be sent
- (d) Packaging, packing, and marking required

6.3 **Supersession Data.** This Commercial Item Description supersedes TT-T-306E, dated May 28, 1993 and TT-T-001386, dated June 9, 1983.

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

{ EMBED Charisma }

6.5 Referenced documents.

Federal Specifications:

- TT-E-515 - Enamel, Alkyd, Lusterless, Quick-Drying.
- TT-E-516 - Enamel, Lusterless, Quick-Drying, Styrenated Alkyd Type.

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.

ASTM Standards:

- D 56 - Flash point by Tag Closed Tester.
- D 130 - Detection of Copper Corrosion from Petroleum Products by the Copper Strip Tamish Test.
- D 156 - Soybolt Color of Petroleum Products (Soybolt Chronometer Method).
- D 1296 - Odor of Volatile Solvents and Diluents.
- D 1353 - Nonvolatile Matter in Volatile Solvents for Use in Paint, Varnish, Lacquer, and Related Products.
- D 1476 - Heptane Miscibility of Lacquer Solvents.

D 1613 - Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish,

D 3539 - Evaporation Rates of volatile Liquids by Short-Film Evaporimeter.

Other publications.

SCAQMD Rule 102

6.6 Source of Documents.

6.6.1 Contact the contracting officer for a copy of paragraph 23.403 of the FAR and 40 CFR parts 61 through 63 and 82.

6.6.2 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.

6.6.3 Copies of Rule 102 may be obtained from the South Coast Air Quality Management District (SCAQMD) 915 E. Flair Dr., El Monte, CA 91731.

6.6.4 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.

MILITARY INTERESTS:

Custodian

Air Force - 99

Review Activities

Army - MI

Air Force - 84

User Activities

Army - GL

Navy - OS

**CIVIL AGENCY
COORDINATING ACTIVITY:**

Preparing Activity:

GSA-FSS