

[METRIC]
A-A-3121
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Superseding
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February 26, 1974

COMMERCIAL ITEM DESCRIPTION

PAINT, RUBBER-BASE: FOR INTERIOR USE (CONCRETE AND MASONRY FLOORS)

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

1. **SCOPE.** This commercial item description (CID) describes a ready-mixed, synthetic rubber-base paint for interior concrete and masonry floors.

2. **CLASSIFICATION.** The rubber-based paint shall be of one type.

3. **SALIENT CHARACTERISTICS.**

3.1 **General requirements.** The paint shall be a one component, ready-mixed, synthetic rubber-base paint.

3.1.1 **Prohibited materials.** The manufacturer shall ensure that no mercury, cadmium, hexavalent chromium compounds, compounds containing pyrophosphates, known or suspected human carcinogens, (as defined by the National Toxicology Program's Annual Report on Carcinogens), or ozone depleting substances (ODS) are used in the formulation. If any of these substances is present as an impurity, its concentration shall be less than 1.0 percent by weight, except carcinogens, whose concentration shall be less than 0.1 percent by weight. The lead content of the nonvolatile portion of the paint shall not exceed 0.06 percent.

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

3.2 **Special requirements.**

3.2.1 **Testing conditions.** Unless otherwise stated in the test method, all routine and referee testing shall be done at the conditions specified in ASTM D 3924.

3.2.2 **Quantitative requirements.** The paint shall meet the quantitative requirements listed in table I.

3.2.3 **Washability.** Immerse an untested cement block, prepared and coated as describe in note 1, in a trisodium phosphate (TSP) solution. The TSP solution shall be composed of 20 grams of technical grade TSP in two gallons of tap water. Maintain the solution at 50 °C to 60 °C (122 °F to 140 °F), during the washability test. While the paint is immersed, scrub the painted surface with a household tampico scrubbing brush. A cycle shall be considered a complete forward and reverse stroke. When compared to

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 Center, Engineering and Supply Management Division (10FTE), 400 15th St. SW, Auburn, WA. 98001-6599.

A-A-3121

one of the unscrubbed blocks used for the adhesion testing, the scrubbed block shall show no evidence of detrimental actions, such as flaking, whitening, softening, or other film irregularities. For referee purposes, the scrubbing brush shall conform to H-B-1490/3 and have a 1.36 Kg (3 lb.) weight on it. A stroke shall be a distance of 5.1 cm to 7.6 cm (2 in to 3 in).

3.2.4 **Color.** The color shall be a visual match to the color specified in the contract or purchase order (see 6.2).

TABLE I QUANTITATIVE REQUIREMENTS

PROPERTY	REQUIREMENT	ASTM TEST METHOD
Prohibited materials		
Lead content, wt. percent of nonvolatile, max	0.06	See note <u>4</u> /
Other prohibited materials listed in 2.1.2, wt. percent	1.0	See note <u>4</u> /
Carcinogenic substances	0.1	See note <u>4</u> /
Water content, percent by weight of paint, max.	0.5	D 4071
Drying times:		
Set to touch, minutes	15 to 45	D 1640 <u>1</u> /
Recoat, h, max.	3	D 1640 <u>1</u> /
Gloss, 60°, minimum	75	D 523
Adhesion	4B	D 3359 <u>1</u> / <u>3</u> /
Wear Index, min.	60	See 3.2.3
Dilution stability, mineral spirits	No separation	See note <u>2</u> /
Washability, cycles	500	See 3.2.2
Coarse particles and skins (retained on No. 325 sieve), Percent by weight of paint, max..	0.5	D 185
Color	Visual match	D 1729
Self-lifting	None	See note <u>1</u> /
Package stability of paint		
Viscosity increase after storage, percent, max.	10	D 1849 and D 562
Settling after storage, max.	10	D 1849 and D 869

1/ Cement plaster test block preparation. Concrete plaster blocks shall be prepared in accordance with FED-STD-141 method 2051 procedure B. The sand used shall be fine Ottawa sand and the mixing shall be by parts per volume. Do not touch or allow any oil, dirt, or grease to get on the surface to be painted. Allow the blocks to cure. Apply one coat of the paint in accordance with the manufacturer's printed instructions. Allow to dry. For the self-lifting test, apply a second coat, in accordance with the manufacturer's instructions, three hours after the first coat was applied. Examine after 48 hours for compliance with table I.

2/ For dilution stability, mix four parts of paint with one part mineral spirits. For referee purposes, mineral spirits shall meet the requirements of A-A-2904 type I.

3/ Use test method B. Use Scotch Brand Tape number 810 or any other cellophane tape with the same adhesive strength.

4/ For referee purposes only. Lead content shall be measured using X-Ray fluorescence, cadmium content by ASTM D 3335, chromium content by ASTM D 3718, and mercury content by ASTM D 3624. Organic solvents shall be identified using FED-STD-141 methods 7356 and 7375.

3.2.5 Abrasion resistance. Determine the wear index in accordance with ASTM D 4060. The panel shall be prepared as described in note 1 above, except that the dry film thickness shall be approximately 15 mils. Use a CS-17 abrasive wheel, 250 gram weight, and 100 revolutions.

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.

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 ozone depleting substance listed in 40 CFR part 61.

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 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 in 3.1 to 3.2.5, 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 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 paint is intended as a rubber-base floor paint for use on interior concrete floors, subjected to dampness. It is not intended for exterior use or for sunlight exposure.

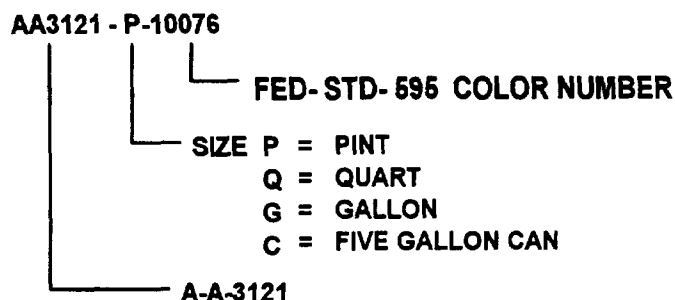
7.2 Ordering Data. Purchasers should include the following information in the contract or purchase order.

- (a) Title, number, and date of this commercial item description.
- (b) Quantity and size of the container required.

A-A-3121

- (c) Color required.
- (d) Address to whom MSDSs should be sent.
- (e) Packaging, packing, and marking required.

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.****Federal Specifications:**

- A-A-2904 - Thinner, Paint, Mineral Spirits, Regular and Odorless.
- H-B-1490/3 -

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.

ASTM Standards:

- D 185 - Coarse Particles in Pigments, Pastes, and Paints.
- D 522 - Mandrel Bend Test of Attached Organic Coatings.
- D 523 - Specular Gloss.
- D 562 - Consistency of Paints Using the Stormer Viscometer.
- D 869 - Evaluating Degree of Settling of Paint.
- 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 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 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 3960 - Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings.
- D 4060 - Abrasion Resistance of Organic Coatings by the Taber Abraser.
- D 4071 - Water content of paint/paint materials, by Karl Fisher Method.

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.

MILITARY INTERESTS:

Preparing Activity

Custodian

Air Force - 99

GSA-FSS

Review Activities

Army - MI

Air Force - 84

User Activities

Army - GL

Navy - OS