NOT MEASUREMENT SENSITIVE

MIL-PRF-81352C
16 June 2005
SUPERSEDING
MIL-PRF-81352B
31 July 1997

PERFORMANCE SPECIFICATION

COATINGS, AIRCRAFT TOUCH-UP

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers general touch-up coatings for use on aircraft and support equipment. The volatile organic compound (VOC) content of these coatings is less than 340 grams/liter (g/l) (2.837 lbs/gal).

1.2 Classification.

1.2.1 Types. The coatings are of the following types, as specified (see 6.2):

Type I - Acrylic base
Type II - Alkyd base
Type III - Polyurethane base

1.3 Part or identifying number (PIN). PINS to be used for coatings acquired to this specification are created as follows:

M81352	X	XX	XXXXX
Specification identification	Type designator Type I = 1 Type II = 2 Type III = 3	Container size designator 1 pint = 1P 1 quart = 1Q 1 gallon = 1G 1 Aerosol container = 1A 1 Touch-up kit = 1T	FED-STD-595 Color designation

Comments, suggestions, or questions on this document should be addressed to: Commander, Naval Air Warfare Center Aircraft Division, Code 491000B120-3, Highway 547, Lakehurst, NJ 08733-5100 or emailed to thomas.omara@navy.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at http://assist.daps.dla.mil.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications and standards. The following specifications and standards form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

FEDERAL STANDARDS

FED-STD-141	-	Paint, Varnish, Lacquer and Related Materials: Methods of Inspection, Sampling and Testing.
FED-STD-595	-	Colors Used in Government Procurement.

DEPARTMENT OF DEFENSE SPECIFICATIONS

MIL-DTL-5624	-	Turbine Fuel, Aviation, Grades JP-4 and JP-5.
MIL-PRF-23377	-	Primer Coatings: Epoxy, High-Solids.
MIL-PRF-23699	-	Lubricating Oil, Aircraft Turbine Engine, Synthetic Base, NATO Code Number 0-156.
MIL-DTL-81706	-	Chemical Conversion Materials for Coating Aluminum and Aluminum Alloys.
MIL-T-81772	-	Thinner, Aircraft Coating.
MIL-PRF-83282	-	Hydraulic Fluid, Fire Resistant, Synthetic Hydrocarbon Base, Metric, NATO Code Number H-537.
MIL-PRF-85582	-	Primer Coatings: Epoxy, Waterborne.

DEPARTMENT OF DEFENSE STANDARDS

MIL-STD-7179	-	Finishes, Coatings, and Sealants, for the Protection of Aerospace Weapons System.

(Copies of these documents are available on line at http://assist.daps.dla.mil/quicksearch or http://assist.daps.dla.mil or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those cited in the solicitation or contract.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI-Z129.1 - Precautionary Labeling of Hazardous Industrial Chemicals. (DoD Adopted)

(Copies of this document are available from www.ansi.org or American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.)

AMERICAN SOCIETY FOR QUALITY (ASQ)

ASQ-Z1.4 - Sampling Procedures and Tables for Inspection by Attributes. (DoD Adopted)

(Copies of this document are available from www.asq.org or American Society for Quality, 600 Plankinton Avenue, Milwaukee, WI 53203.)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) INTERNATIONAL

ASTM-D185 - Coarse Particles in Pigments, Pastes, and Paints, Standard Test Method for. (DoD Adopted)
ASTM-D522 - Mandrel Bend Test of Attached Organic Coatings, Standard Test Method for. (DoD Adopted)
ASTM-D523 - Specular Gloss, Standard Test Method for. (DoD Adopted)
ASTM-D823 - Producing Films of Uniform Thickness of Paint, Varnish, and Related Products on Test Panels, Standard Test Methods for. (DoD Adopted)
ASTM-D1200 - Viscosity by Ford Viscosity Cup, Standard Test Method for. (DoD Adopted)
ASTM-D1210 - Fineness of Dispersion of Pigment-Vehicle Systems, Standard Test Method for. (DoD Adopted)
ASTM-D1296 - Odor of Volatile Solvents and Diluents, Standard Test Method for. (DoD Adopted)

ASTM-D1308 - Effect of Household Chemicals on Clear and Pigmented Organic Finishes, Standard Test Method for. (DoD Adopted)
ASTM-D1640 Organic Coating, Drying, Curing, or Film Formation of, at Room Temperature. (DoD Adopted)
ASTM-D1729 - Visual Appraisal of Colors and Color Differences of Diffusely-Illuminated Opaque Materials, Standard Practice for. (DoD Adopted)
ASTM-D2244 - Calculation of Color Differences from Instrumentally Measured Color Coordinates, Standard Test Method for. (DoD Adopted)
ASTM-D2805 - Hiding Power of Paints by Reflectometry, Standard Test Method for. (DoD Adopted)
ASTM-D3335 - Low Concentrations of Lead, Cadmium, and Cobalt in Paint by Atomic Absorption Spectroscopy, Standard Test Method for. (DoD Adopted)
ASTM-D3718 - Low Concentrations of Chromium in Paint by Atomic Absorption Spectroscopy, Standard Test Method for. (DoD Adopted)
ASTM-D3924 - Standard Environment for Conditioning and Testing of Paint, Varnish, Lacquer and Related Materials, Standard Specification for. (DoD Adopted)
ASTM-D3925 - Sampling Liquid, Paints and Related Pigmented Coatings, Standard Practice for.
ASTM-D3960 - Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings, Standard Practice for. (DoD Adopted)
ASTM-G155 - Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials, Standard Practice for. (DoD Adopted)

(Copies of these documents are available from www.astm.org or ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE) INTERNATIONAL

SAE-AMS-QQ-A-250/5 - Aluminum Alloy Alclad 2024, Plate and Sheet. (DoD Adopted)

(Copies of these documents are available from www.sae.org or SAE World Headquarters, 400 Commonwealth Drive, Warrendale, PA 15096-0001.)

2.4 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Qualification. Coatings furnished under this specification shall be products that are authorized by the qualifying activity for listing on the applicable qualified products list before contract award (see 4.3 and 6.3).

3.2 Toxicity. The coatings shall have no adverse effect on the health of personnel when used for their intended purpose when evaluated in accordance with 4.6.8 (see 6.4). The coatings shall contain no free isocyanates.

3.3 Composition. The coatings shall be a one component composition and shall not contain chromium, when tested in accordance with ASTM-D3718, nor cadmium, cadmium compounds, or more than 0.06 percent by weight of lead metal or lead compounds, when tested in accordance with ASTM-D3335 (see 4.6).

3.3.1 Volatile organic compound (VOC) content. When mixed in accordance with the manufacturer's instructions to achieve the application viscosity specified in 3.5.4, the VOC content of the coatings shall be not greater than 340 g/l (2.837 lbs/gal), when tested in accordance with ASTM-D3960 (see 4.6). Halogenated solvents, except for parachlorofluoromethylbenzene or equivalent as determined by the qualifying activity, shall be prohibited in the formulation of this product.

3.3.2 Thinner compatibility. The coatings shall be miscible in water or compatible with the following solvents: type I and II coatings shall be compatible with MIL-T-81772, type III; and type III coating shall be compatible with MIL-T-81772, type I.

3.4 Storage stability.

3.4.1 Extended storage stability. The coatings, as packaged by the manufacturer, shall meet all the requirements of this specification. For metal containers the storage period shall be a minimum of one year and for plastic containers the period shall be a minimum of six months upon the receipt of material at the testing facility (see 4.6).

3.4.2 Accelerated storage stability. The coatings, as packaged by the manufacturer, shall not develop increased internal container pressure when tested in accordance with 4.6.1. After storage, the contained material shall be free of lumps, skins, gels, or particulate matter, either suspended in solution or settled on the inner surface of the container. When stirred with a paddle, the contained material shall be a smooth, homogenous mixture. When applied in accordance with 4.5.2, the coating shall be a smooth, uniform film, free of grains, lumps and streaks.

3.5 Physical properties.

3.5.1 Condition in container. The coatings shall exhibit no grit, skinning, curdling, livering or excessive pigment flotation. The coatings shall show no more pigment settling or caking than can be easily and completely reincorporated to a smooth homogenous state by mixing with a hand paddle. In addition, the containers shall exhibit no deformity (see 4.6.10).

3.5.2 Coarse particle content. The particles retained on a No. 325 sieve shall be not greater than 0.1 percent by total weight of the coating, when tested in accordance with ASTM-D185 (see 4.6).

3.5.3 Fineness of grind. The fineness of grind of the coatings shall be not less than 7.0 for gloss colors and not less than 5.0 for all other colors when tested in accordance with ASTM-D1210 (see 4.6).

3.5.4 Viscosity. The viscosity of the coatings, as prepared for application in accordance with the manufacturer's instructions, shall be 16 to 25 seconds through a #4 Ford cup when tested in accordance with ASTM-D1200 (see 4.6).

3.6 Working properties. The coatings shall yield a smooth and uniform film when applied by spray, brush, or roller and shall conform to 3.6.1 through 3.6.4.

3.6.1 Odor. The odor of the coatings shall be characteristic of the solvents used when tested in accordance with ASTM-D1296 (see 4.6). The air-dried coatings shall retain no residual odor 48 hours after application.

3.6.2 Drying time. The coatings, when applied to a wet film thickness of 1.7 to 2.3 mils [43 to 58 microns (μm)], shall dry tack-free within 60 minutes, when tested in accordance with ASTM-D1640 (see 4.6).

3.6.3 Surface appearance. The coatings shall dry to a smooth, uniform film, free of runs, sags, bubbling, wrinkling, streaking, blushing, haze, blisters, coarse particles, or other surface irregularity when prepared and examined in accordance to 4.6.2 (see 4.6).

3.6.4 Coating system compatibility. All coatings supplied under this specification shall be compatible with the coatings listed in MIL-STD-7179, table I.

3.7 Film properties.

3.7.1 Color. When tested in accordance with ASTM-D1729 (see 4.6), the color of the coatings shall be a visual match with the specified FED-STD-595 color chip (see 6.2).

3.7.2 Specular gloss. The applied coatings shall conform to table I when tested at a 60° geometry in accordance with ASTM-D523 (see 4.6).

TABLE I. Specular gloss.

	Minimum	Maximum
Gloss	80	---
Semi-gloss	15	45
Camouflage	---	5

3.7.3 Adhesion (wet). The coatings, applied to test panels in accordance with 4.5 through 4.5.2, and then immersed in distilled water for 24 hours, shall not peel away from the test panel when tested in accordance with FED-STD-141, Method 6301.3 (see 4.6).

3.7.4 Opacity. The coatings, cast to a dry film thickness of 1.7 to 2.3 mils (43 to 58 μm) on a black and white chart and tested in accordance with ASTM-D2805 (see 4.6), shall have a contrast ratio of not less than 0.95 for all colors, with the exception of FED-STD-595, color 13538, which shall have a contrast ratio of not less than 0.90.

3.7.5 Flexibility. The coatings, applied to test panels in accordance with 4.5 through 4.5.2, shall exhibit no cracking, peeling, or loss of adhesion, when bent over a 1.0 in. (25.4 mm) mandrel, in accordance with ASTM-D522, method B (see 4.6).

3.8 Resistance properties.

3.8.1 Fluid resistance. The coatings, applied to test panels in accordance with 4.5 through 4.5.2, and tested in accordance with 4.6.4, shall exhibit no blistering, softening, or other coating defects four hours after removal from the fluids. A slight staining of the coatings is acceptable.

3.8.2 Weather resistance. The coatings shall have a color difference value (ΔE) of not greater than 2.0, as compared to the unexposed coatings, when tested in accordance with 4.6.5.

3.8.3 Heat resistance. The color change of the coatings (ΔE) shall be not greater than 1.0 as compared to the unexposed control coating, when tested in accordance with 4.6.6.

3.8.4 Water resistance. The coatings shall exhibit no cracking, blistering, or whitening when tested in accordance with 4.6.7. A slight whitening or dulling, which is removed by lightly wiping with a soft cloth, shall not be cause for rejection.

3.9 Marking and labeling. All containers that serve as shipping containers shall be marked in accordance with ANSI-Z129.1. Individual containers shall bear permanent labels showing the following:

- Specification MIL-PRF-81352C, “Coating, Aircraft Touch-up”
- Type number and name (see 1.2.1)
- Color (FED-STD-595 color name and number)
- Manufacturer’s name, product identification, and lot number
- Date of manufacture (month/year)
- VOC content (g/l) and type of thinner compatible with the coating
- Net contents
- Mixing instructions

4. VERIFICATION

4.1 Classification of inspection. The inspection requirements specified herein are classified as follows:

a. Qualification inspection (see 4.3)
b. Conformance inspection (see 4.4).

4.2 Inspection conditions. Unless otherwise specified, all inspections shall be performed in accordance with ASTM-D3924. Unless otherwise stated in the test method or paragraph, room temperature shall be 70 ±10 °F (21 ±5 °C) and relative humidity of 50 ±10 percent.

4.3 Qualification inspection. The qualification inspection shall consist of all examinations and tests specified in table II.

4.3.1 Qualification inspection samples. The test samples for qualification shall consist of one quart of the FED-STD-595, colors 17925 and 36375. The material shall be furnished in the type containers to be used in filling contract orders (see 6.3.1).

4.4 Conformance inspection. The conformance inspection shall consist of all the examinations and tests specified in table II except composition, extended storage stability, accelerated storage stability, and weather resistance. In the event that a test sample fails to meet any requirement of this specification, the lot (see 6.5) represented by the sample shall be rejected.

4.4.1 Sampling.

4.4.2 Sampling for conformance tests. Samples shall be selected in accordance with ASTM-D3925.

4.4.3 Sampling of filled containers. Samples shall be selected at random from each lot in accordance with ASQ-Z1.4.

4.5 Test panels. Test panels shall be prepared under laboratory conditions (see 4.2). The dimensions for all test panels shall be 0.020 x 3 x 6 in. (0.5 x 76.2 x 152.4 mm). Unless otherwise specified in the test method, the test panels shall be Alclad aluminum alloy 2024 (T3 temper) conforming to SAE-AMS-QQ-A-250/5.

4.5.1 Panel preparation. The panels shall be treated with a conversion coating conforming to MIL-DTL-81706, class 1A.

4.5.2 Application of coatings.

a. Primer coating. One cross-coat of a primer coating conforming to MIL-PRF-23377 or MIL-PRF-85582 shall be spray-applied to a dry film thickness of 0.6 to 0.9 mils (15 to 23 μm) in accordance with ASTM-D823. Air-dry the primer for a minimum of one hour. The primer surface shall be tack-free prior to topcoating.

b. Topcoat. Prepare the coating in accordance with the manufacturer's instructions (the admixed topcoat shall be reduced with thinner conforming to MIL-T-81772 if so instructed by the manufacturer). If reducing with thinner, do not exceed the maximum allowable VOC content (see 3.3.1). Spray-apply the coating in accordance with ASTM-D823 to a dry film thickness of 1.7 to 2.3 mils (43 to 58 μm). Prior to testing, the applied coating shall be air-dried for a minimum of 14 days at room temperature.

4.6 Test methods. The tests of this specification shall be conducted in accordance with table II and 4.6.1 through 4.6.7 with test panels prepared in accordance with 4.5 through 4.5.2. Unless otherwise specified in the test method or paragraph, all testing shall be conducted under the inspection conditions specified in 4.2.

4.6.1 Accelerated storage stability. The coating, in its original, unopened container, shall be stored at 125 ±3 °F (52 ±2 °C) for a minimum of 14 consecutive days. During the storage period, the container shall be placed in a larger, vented container to confine any splashing that may occur if the lid of the unopened container is blown off by increased internal pressure. At the end of the 14 day period, remove the container and allow it to cool to room temperature. If the unopened container is deformed upon removal from storage, do not open and discard. If it is not deformed, open the container carefully and examine its contents for conformance to 3.4.2.

4.6.2 Surface appearance. The coatings shall be applied to test panels in accordance with 4.5 through 4.5.2 for conformance to 3.6.3.

4.6.3 Specular gloss. The coatings shall be applied directly to the unprimed test panels and air-dried for 14 days. Examine in accordance with ASTM-D523 at a 60° geometry for conformance to 3.7.2.

TABLE II. Test methods.

Test	Requirement Paragraph	Test paragraph	FED-STD-141 Method Number	ASTM Method
Toxicity	3.2	4.6.8	---	---
Composition	3.3			
Cadmium and lead content		---	---	D3335
Chromium content		---	---	D3718
VOC Content	3.3.1	---	---	D3960
Thinner Compatibility	3.3.2	---	---	---
Extended Storage Stability 1/	3.4.1	4.6.9	---	---
Accelerated Storage Stability	3.4.2	4.6.1	---	---
Condition in Container	3.5.1	4.6.10	---	---
Coarse Particle Content	3.5.2	---	---	D185
Fineness of Grind	3.5.3	---	---	D1210
Viscosity	3.5.4	---	---	D1200
Working Properties	3.6	---	---	---
Odor	3.6.1	---	---	D1296
Drying Time	3.6.2	---	---	D1640
Surface Appearance	3.6.3	4.6.2	---	---
Coating system compatibility	3.6.4	---	---	---
Color	3.7.1	---	---	D1729
Specular Gloss	3.7.2	4.6.3	---	D523
Adhesion	3.7.3	---	6301.3	---
Opacity	3.7.4	---	---	D2805
Flexibility	3.7.5	---	---	D522
Fluid Resistance	3.8.1	4.6.4	---	---
Weather Resistance	3.8.2	4.6.5	---	G155
Heat Resistance	3.8.3			
Type I		4.6.6	---	D2244
Type II & III		4.6.6		D2244
Water Resistance	3.8.4	4.6.7	---	D1308
Marking and labeling	3.9	---	---	---

1/ The daily mean ambient temperature at the storage location shall be 35 to 95 °F (1.7 to 35 °C) and the peak ambient air temperature at the storage location shall not be greater than 115 °F (46 °C).

4.6.4 Fluid resistance. When immersed in the fluids in accordance with table III the coatings shall be examined for conformance to 3.8.1.

TABLE III. Fluid immersion conditions.

Fluid	Fluid Temperature	Time of Immersion	
Lubricating oil conforming to MIL-PRF-23699	250 ±5 °F (121 ±3 °C)	Type I Type II Type III	4 hours 4 hours 24 hours
Hydraulic fluid conforming to MIL-PRF-83282	150 ±3 °F (66 ±3 °C)	24 hours	
JP-5 fuel conforming to MIL-DTL-5624	Room temperature	7 days	

4.6.5 Weather resistance. Prepare three test panels in accordance with 4.5 through 4.5.2. One test panel shall be used as the control. The other two test panels shall be exposed for 500 hours in a Xenon-arc weatherometer (Atlas Electric Devices Company or equivalent) that is cycling between 102 minutes of light only and 18 minutes of light and water spray. After exposure, measure the color difference (ΔE) value of the exposed panels and the control and examine the coating for conformance to 3.8.2. The following conditions shall apply when testing in accordance with ASTM-G155, type BH:

a. Black body temperature in cabinet: 145 ±5 °F (63 ±3 °C).
b. Relative humidity in cabinet: 50 ±5 percent.
c. Intensity (spectral irradiance) of Xenon-arc: 0.35 ±0.01 Watts/meter^2 (W/m^2) at a wavelength of 340 nm.
d. Cabinet temperature: 108 ±5 °F (42 ±3 °C).

4.6.6 Heat resistance. Prepare two panels in accordance with 4.5 through 4.5.2. One test panel shall act as the control, the other as the test specimen. Expose the test specimen for 60 minutes at 250 ±5 °F (121 ±3 °C) in accordance with ASTM-D2244. After exposure, examine the test specimen and the unexposed control in accordance with ASTM-D2244 for conformance to 3.8.3.

4.6.7 Water resistance. Test panels shall be prepared in accordance with 4.5 through 4.5.2, with the exception that the applied coatings shall be air-dried for seven days at room temperature. The test panels shall then be immersed in distilled water in accordance with ASTM-D1308 for 24 hours at room temperature. Within five minutes of removal from the water, the coatings shall be examined for conformance to 3.8.4.

4.6.8 Toxicity. The product shall be evaluated by the Navy Environmental Health Center (NAVENVIRHLTHCEN) using the administrative Health Hazard Assessment (HHA) (see 6.4.1).

4.6.9 Extended storage stability. After a minimum of one year for metal containers and six months for plastic containers from the receipt of the material at the testing facility the extended storage stability test shall consist of all examinations and tests specified in table II except the extended storage stability test. The daily mean ambient temperature for storage shall be

35 to 95 °F (1.7 to 35 °C) and the peak ambient air temperature for storage shall be not greater than 115 °F (46 °C).

4.6.10 Condition in Container. Upon opening a full previously unopened container the coating shall be examined for conformance to 3.5.1. The coating shall then be mixed with a hand paddle and examined for conformance to 3.5.1.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activities within the Military Service or Defense Agency, or within the military service's system commands. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature which may be helpful but is not mandatory.)

6.1 Intended use. The combination of all properties of MIL-PRF-81352 provides the necessary requirements for an aircraft touch-up coating. The combination of properties exceeds available commercial coatings in order to meet the extremes of the naval aviation environment. The coating conforming to this specification is intended to be an exterior coating for touch-up purposes over epoxy primer conforming to MIL-PRF-23377 or MIL-PRF-85582. All types (see 1.2.1) of this coating are used for insignia and marking coating directly over freshly applied epoxy topcoat or polyurethane topcoat. This coating can be used on any aged coating that has been scuff-sanded prior to application.

6.2 Acquisition requirements. Acquisition documents should specify the following:

a. Title, number, and date of this specification, including any amendments.

b. Type and color (see 1.2 and 1.3).

c. Quantity, size, and type of containers in which the coating is to be furnished (see 1.3).

d. Packaging requirements (see 5.1).

e. Test or inspection report, if required (see 6.5.1).

6.3 Qualification. With respect to products requiring qualification, awards will be made only for products which are, at the time of award of contract, qualified for inclusion in Qualified

Products List QPL-81352, whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from the Commander, Naval Air Warfare Center, Code 4.9.7, Building 2188, Patuxent River, MD 20670-1908.

6.3.1 Qualification inspection sample identification. Qualification inspection samples are to be forwarded to the laboratory designated in the letter of authorization (see 6.3) and identified as follows:

Qualification test samples.
Specification MIL-PRF-81352, type I, II, or III
Coatings, Aircraft Touch-up
Manufacturer's name and product number
Submitted by (name and date) for qualification testing in accordance with authorization (reference authorizing letter)

6.4 Material hazards.

6.4.1 Toxicity evaluation. A flowchart for the HHA process can be found as enclosure (1) of BUMEDINST 6270.8. The HHA is a review of the product based on information submitted by the manufacturer, to assess health hazards associated with the handling, application, use and removal of the product. Sufficient data to permit an HHA of the product should be provided by the manufacturer/distributor to the NAVENVIRHLTHCEN. To obtain current technical information requirements specified by the NAVENVIRHLTHCEN or any questions concerning toxicity, information required to conduct a HHA, and requests for a HHA should be addressed to the Commanding Officer, Navy Environmental Health Center, ATTN: Hazardous Materials Department, Industrial Hygiene Directorate, 620 John Paul Jones Circle, Suite 1100, Portsmouth, VA 20378-2103. Upon receipt of the HHA, a copy should be provided to Commander, Naval Sea Systems Command, ATTN: SEA 05M1, 1333 Isaac Hull Ave., SE, Stop 5133 Washington Navy Yard, DC 20376-5133.

6.4.2 Material Safety Data Sheet (MSDS). An MSDS must be prepared and submitted in accordance with FED-STD-313. The MSDS must also meet the requirements of 29 CFR 1910.1200. The 29 CFR 1910.1200 requires that the MSDS for each hazardous chemical used in an operation must be readily available to personnel using the material. Questions pertinent to the effect(s) of these coatings on the health of personnel using them should be referred by the procuring activity to the appropriate medical service, who will act as its adviser. Contracting officers will identify the activities requiring copies of the MSDS.

6.5 Lot formation. A lot consists of all the same type and color of coating, manufactured at one time, forming part of one contract or order, and submitted for acceptance to the procuring activity.

6.5.1 Report of tests. When required (see 6.2), the manufacturer must submit to the procuring activity a certified test report for each lot of material. The test report must show the results of the conformance tests of this specification.

6.6 Subject term (keyword) listing.

Acrylic
Alkyd
Polyurethane

6.7 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:
Army - MR
Navy - AS
Air Force - 11
GSA - FSS

Review:
Army - MD1
Navy -CG
Air Force - 70

Preparing activity:
Navy - AS
(Project 8010-0218)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at http://assist.daps.dla.mil.