

NOT MEASUREMENT  
SENSITIVE

MIL-L-81352A(AS)  
AMENDMENT 2  
30 AUGUST 1996  
SUPERSEDING  
AMENDMENT 1  
31 JANUARY 1973

## MILITARY SPECIFICATION

### LACQUER, ACRYLIC (FOR NAVAL WEAPONS SYSTEMS)

This amendment forms a part of MIL-L-81352A(AS), dated 10 February 1972, and is approved for use by the Naval Air Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

#### PAGE 1

- \* Bottom of page: ADD the following:

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Air Warfare Center Aircraft Division, Code 414100 B120-3, Highway 547, Lakehurst, NJ 08733-5100, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

#### PAGE 2

- \* 2.1: DELETE "TT-P-143 - Paint, Varnish, Lacquer, And Related Materials, Packaging, Packing, And Marking of," and "TT-P-320 - Pigment, Aluminum; Powder And Paste, for Paint."
- \* 2.1: ADD "PPP-P-1892 - Paint, Varnish, Lacquer, And Related Materials: Packaging, Packing, And Marking Of

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\* 2.1 DELETE the following documents:

- “TT-P-343 - Pigment, Carbon-Black, Dry;
- TT-P-345 - Pigment, Chrome-Green, Pure, Dry;
- TT-P-346 - Pigment, Chrome-Yellow And Chrome-Orange, Dry;
- TT-P-347 - Pigment, Chromium-Oxide-Green, Dry;
- TT-P-350 - Pigment, Lampblack-Dry;
- TT-P-355 - Pigment, Copper-Phthalocyanine-Blue, Dry;
- TT-P-375 - Pigment, Indian Red And Bright Red (Iron Oxide), Dry (For Use In Protective Coatings);
- TT-P-385 - Pigment, Iron-Blue, Dry;
- TT-P-442 - Pigment, Titanium Dioxide, (For Protective Coatings);
- TT-P-458 - Pigment, Yellow-Iron-Oxide, Hydrated, Synthetic, Dry;
- TT-X-916 - Xylene (For Use In Organic Coatings);
- MIL-E-7125 - Ethylene Glycol Monoethyl Ether Acetate;
- and MIL-A-15197 - Antimony-Sulfide (Pigment) (Paint Ingredient).”

\* 2.1, DELETE title of MIL-C-22750 and SUBSTITUTE “Coating, Epoxy, High-Solids.”

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\* 2.1 DELETE “MIL-C-22751 - Coating System, Epoxy-Polyamide, Chemical And Solvent Resistant: Process For Application Of,” and “MIL-STD-105, “Sampling Procedures And Tables For Inspection By Attributes.”

\* 2.1, DELETE “MIL-P-23377 - Primer Coating, Epoxy Polyamide, Chemical and Solvent Resistant” and SUBSTITUTE “MIL-P-23377 - Primer Coatings: Epoxy, High-Solids.”

\* 2.1 ADD "MIL-T-81772 - Thinner, Aliphatic Polyurethane Coating and MIL-P-85582 - Primer Coatings: Epoxy, Waterborne.”

\* ADD new paragraph 2.2:

- \* “2.2 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are Department of Defense (DoD) adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

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AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI-Z1.4	-	Sampling Procedures and Tables for Inspection by Attributes
ANSI-Z129.1	-	American National Standard for the Precautionary Labeling of Hazardous Industrial Chemicals

(Application for copies of ANSI-Z129.1 should be addressed to the American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.)

(Application for copies of ANSI-Z1.4 should be addressed to the American Society for Quality Control, PO Box 3005, 611 East Wisconsin Avenue, Milwaukee, WI 53201-4606.)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM-D1006	-	Conducting Outdoor Exposure Tests of Paint on Wood, Standard Practice for
ASTM-D1200	-	Viscosity by Ford Viscosity Cup, Standard Test Method for
ASTM-D1296	-	Odor of Volatile Solvents and Diluents, Standard Test Method for
ASTM-D2369	-	Volatile Content of Coatings, Standard Test Method for
ASTM-D2698	-	Determination of Pigment Content of Solvent-Type Paints by High-Speed Centrifuging, Standard Test Method for

(Application for copies should be addressed to the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959)"

PAGE 5

- \* 3.4.1 DELETE and SUBSTITUTE:
- \* "3.4.1 Resin. The resinous portion of the lacquer shall consist of a one-to-one blend, by weight, of acrylic and ester type resins. An infrared spectrogram ("fingerprint") of the resin vehicle portion, without pigments and solvents, shall depict the major energy absorbance bands in Figures 1 and 2."
- \* 3.4.3.1, lines 2, 4, and 5, DELETE "ethylene glycol monoethyl ether acetate" and substitute "propylene glycol methyl ether acetate."

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- \* Table III: ADD "14097" under FED-STD-595 Color No. column, "Field Green" under Color column, and "Medium Chrome Yellow, Phthalocyanine Blue, and Antimony Sulfide" under Pigmentation column.
- \* Table III, under Pigmentation column: DELETE "TT-P-442, TT-P-343, TT-P-458, TT-P-385, TT-P-375, TT-P-355, TT-P-347, TT-P-345, TT-P-346, and MIL-A-15197."
- \* Table III: DELETE footnote 2/ and reference to it.

PAGE 12

- \* 3.5.13.1, lines 2 and 3: DELETE "24 hours at a temperature of 176° ±2°C (350° ±4°F)" and SUBSTITUTE "4 hours at a temperature of 121° ±2°C (250° ±4°F)."
- \* 3.5.13.2: DELETE and SUBSTITUTE "The cured lacquer shall be capable of withstanding outdoor exposure in the vicinity of Key West, Florida, for a minimum of one year without deterioration, loss of gloss, or color change, in accordance with table XI."

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- \* 3.5.13.3, line 2: DELETE "24 hours at 176° ±2°C (350° ±4°F)" and SUBSTITUTE: "20 hours at 127° ±2°C (260° ±4°F), followed by 1 hour at 163° ±3°C (325° ±5°F)."

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- \* Table V: ADD "14097" under FED-STD-595 Color No. column, "FIELD GREEN" under Color name column, and "0.98" under Contrast Ratio column.

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- \* 4.3.2.2, line 3: DELETE "MIL-STD-105" and SUBSTITUTE "ANSI-Z1.4."

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- \* 4.3.3.3.2: DELETE in its entirety.
- \* 4.5.1, end of line 5: DELETE "Spray panels with...0.6 to 0.8 mil." and SUBSTITUTE "Spray apply primer coating conforming to MIL-PRF-23377 or MIL-P-85582 to a dry film

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thickness of 0.6 to 0.9 mil. Allow the primer coating to air-dry for 2 hours prior to application of the lacquer.”

- \* 4.5.1, line 8: DELETE “1.0 to 1.4 mils” and SUBSTITUTE “1.0 to 1.2 mils”.

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- \* 4.5.1, line 12: DELETE "3.4.3.3" and SUBSTITUTE "MIL-T-81772."
- \* Table VI: DELETE "Cellusolve acetate" and SUBSTITUTE "Propylene glycol methyl ether acetate."

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- \* Table VII: DELETE "Cellosolve acetate" and SUBSTITUE "Propylene Glycol methyl ether acetate."
- \* 1/ NOTE, line 9: ADD the following after "purposes": ", except that substitutions may be made for the Rohm and Haas resins A-21 and B-44, provided that the resulting formulations meet all specified requirements."

PAGE 20

- \* Table IX: DELETE title for second column and SUBSTITUTE “Test Method (FED-STD-141, Method Number or ASTM test method, as applicable).”
- \* Table IX, under second column:
  - Pigment content: DELETE “4022” and SUBSTITUTE “ASTM-D2698”
  - Volatile and nonvolatile content: DELETE “4041” and SUBSTITUTE “ASTM-D2369”
  - Odor: DELETE “4401” and SUBSTITUTE “ASTM-D1296”
  - Weather Resistance: DELETE “6161” and SUBSTITUTE “ASTM-D1006”
  - Viscosity (No. 3 Ford Cup) (except clear): DELETE “4282” and SUBSTITUTE “ASTM-D1200”

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- \* Table IX: DELETE title for second column and SUBSTITUTE “Test Method (FED-STD-141, Method Number or ASTM test method, as applicable).”
- \* Table IX, under third column: DELETE “4.6.10.”

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- \* 4.6.9, lines 4 and 5: DELETE "176° ±2°C (350° ±4°F) for a period of 24 hours." and SUBSTITUTE: "121° ±2°C (250° ±4°F) for a period of 4 hours."
- \* 4.6.10: DELETE in its entirety.
- \* 4.6.11, line 2: DELETE: "350°F for 24 hours" and SUBSTITUTE "127° ±2°C (260° ±4°F) for 20 hours, followed by 1 hour at 163° ±3°C (325° ±5°F)."

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- \* 5.2, line 2: DELETE "TT-P-143" and SUBSTITUTE "PPP-P-1892 and ANSI-Z129.1".
- \* 5.2, fourth paragraph: DELETE "For Composition L, the manufacturer shall modify the above directions to specify a nonphotochemically reactive thinner.to be employed" and SUBSTITUTE "For composition L, thinner conforming to MIL-T-81772 shall be employed."

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- \* DELETE DD Form 1426, "Standardization Document Improvement Proposal," and SUBSTITUTE the form on the last page of this amendment.

The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

Preparing activity:  
Navy - AS  
(Project No. 8010-N553)

# STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

## INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.  
NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

## I RECOMMEND A CHANGE:

1. DOCUMENT NUMBER

MIL-L-81352A(AS)

2. DOCUMENT DATE (YYMMDD)

10 FEBRUARY 1972

3. DOCUMENT TITLE

LACQUER, ACRYLIC (FOR NAVAL WEAPONS SYSTEMS)

4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed)

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (Last, First, Middle Initial)

b. ORGANIZATION

c. ADDRESS (Include Zip Code)

d. TELEPHONE  
(Include Area Code)  
(1) Commercial:7. DATE SUBMITTED  
(YYMMDD)(2) DSN:  
(If Applicable)

8. PREPARING ACTIVITY

a. NAME  
COMMANDER  
NAVAL AIR WARFARE CENTER  
AIRCRAFT DIVISION

b. TELEPHONE NUMBER (Include Area Code)

(1) Commercial  
(908) 323-7488

(2) DSN

624-7488

c. ADDRESS (Include Zip Code)  
CODE 414100 B120-3  
HIGHWAY 547  
LAKEHURST, NJ 08733-5100IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:  
Defense Quality and Standardization Office, 5203 Leesburg Pike,  
Suite 1403, Falls Church, VA 22041-3466  
Telephone (703) 756-2340 DSN 289-2340

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