

NOT MEASUREMENT
SENSITIVE

MIL-P-85582B
INTERIM AMENDMENT 1 (AS)
31 AUGUST 1994

MILITARY SPECIFICATION

PRIMER COATINGS: EPOXY, WATERBORNE

This interim amendment is approved for use within the
Naval Air Systems Command, Department of the Navy,
with MIL-P-85582B, dated 23 May 1994.

PAGE 1

1.1, DELETE and SUBSTITUTE:

"1.1 Scope. This specification covers the requirements for two types (see 1.2.1) and two classes (see 1.2.2) of waterborne, epoxy primer coatings that are corrosion inhibiting, and chemical and solvent resistant. These primer coatings are formulated primarily for spray application and are compatible with polyurethane and epoxy topcoats (see 6.9). The maximum volatile organic compound (VOC) content of the admixed primer coatings is 340 grams per liter (g/l) (2.8 pounds per gallon (lbs/gal)). Unless a specific type and/or class is referenced in the contract or purchase order, MIL-P-85582B, Type I, Class C1 or C2 is the default. Class N may not be substituted for Class C1 or C2, unless authorization for its use is given by the procuring activity or engineering authority for the system or item to which the primer coating is to be applied. See 6.13 for the cross-reference of classes to previous revisions of this specification. See 6.1 for the intended use of these materials.

1.2.2, DELETE paragraph and SUBSTITUTE:

"1.2.2 Class. The primer coatings consist of the following classes:

Class C1 - Barium chromate based corrosion inhibitors
Class C2 - Strontium chromate based corrosion inhibitors
Class N - Non-chromate based corrosion inhibitors"

MIL-P-85582B
INTERIM AMENDMENT 1 (AS)

PAGE 6

3.4.2.1, 3.4.2.2, and 3.4.2.3: DELETE paragraphs and SUBSTITUTE:

"3.4.2.1 Class C1. The pigment portion of the Class C1 primer coating shall contain barium chromate as the corrosion inhibitor, siliceous extenders, and other pigments, as required.

3.4.2.2 Class C2. The pigment portion of the Class C2 primer coating shall contain strontium chromate as the corrosion inhibitor, siliceous extenders, and other pigments, as required.

3.4.2.3 Class N. The pigment portion of the Class N primer coating shall contain non-chromate corrosion inhibitors, siliceous extenders, and other pigments, as required. When tested in accordance with ASTM D3718 (see 4.6 and Table I), the Class 2 primer coating shall not contain chromium."

PAGE 10

4.3.1: DELETE and SUBSTITUTE:

"4.3.1 Qualification samples. The test samples shall consist of a minimum of one quart (admixed) of the coating material. The material shall be furnished in containers of the type to be used in filling contract orders. Samples shall be identified as follows and forwarded to the laboratory designated in the letter of authorization (see 6.4).

- Qualification test samples.
- Specification MIL-P-85582B, Type I or II, and Class C1, C2, or N (as applicable).
- Primer Coatings: Epoxy, Waterborne.
- Manufacturer's name and product number
- Submitted by (name and date) for qualification testing in accordance with authorization (reference authorizing letter).

PAGE 13

4.5: DELETE and SUBSTITUTE:

"4.5 Test panels. Test panels shall be prepared under laboratory test conditions (see 4.6). With the exception of the wet adhesion test (4.6.5), flexibility test (4.6.6), and the filiform corrosion test (4.6.10.2), all panels used for test purposes shall be aluminum alloy 2024 (T3 temper) conforming to QQ-A-250/4, with approximate dimensions of 0.51 by 76.2 by 152.4 mm (0.020 by 3 by 6 in.). Conversion coating shall be applied to test panel to produce coatings conforming to MIL-C-5541, Class 1A (conversion coating)."

MIL-P-85582B
INTERIM AMENDMENT 1 (AS)

PAGE 16

4.6.7: DELETE 4.6.7 and SUBSTITUTE:

"4.6.7 Water resistance. Test panels shall be prepared with primer coating only (see 4.5 through 4.5.1) and primer coating and topcoat (see 4.5 through 4.5.2). After immersion in distilled water maintained at $49^{\circ} \pm 3^{\circ}\text{C}$ ($120^{\circ} \pm 5^{\circ}\text{F}$) for four days, the coatings shall be examined for softening, wrinkling, blistering, and any other visually detectable deficiency (see 3.7.1). Some discoloration shall not be cause for rejection of Class C1 or C2 primer coating only, as chromated pigments sometimes cause discoloration by leaching."

PAGE 17

4.6.8.2: DELETE 4.6.8.2 and SUBSTITUTE:

"4.6.8.2 Corrosion resistance (filiform). Aluminum alloy alclad 2024 (T3 temper) test panels conforming to QQ-A-250/5, dimensions of 0.020 by 3 by 6 in. shall be conversion coated to produce coatings conforming to MIL-C-5541, Class 1A. Primer coating and topcoat shall then be applied to the test panels in accordance with 4.5.1 through 4.5.2. Two intersecting lines shall be scribed across the surface of each test panel and shall penetrate through the clad and into the base metal. The test panels shall be placed vertically in a desiccator containing 12 N HCl for one hour at $24^{\circ} \pm 3^{\circ}\text{C}$ ($75^{\circ} \pm 5^{\circ}\text{F}$). Within five minutes of removal from the desiccator, the test panels shall be placed in a humidity cabinet maintained at $40^{\circ} \pm 1.7^{\circ}\text{C}$ ($104^{\circ} \pm 3^{\circ}\text{F}$) and relative humidity (RH) of 80 ± 5 percent for 1000 hours. The test panels shall then be examined for conformance to 3.7.2.2. Filiform corrosion appears as thread-like filaments initiating from the exposed substrate and spreading underneath the coating film. A general description of filiform growth appears in ASTM D2803."

MIL-P-85582B
INTERIM AMENDMENT 1 (AS)

PAGE 20

5.2: DELETE and SUBSTITUTE:

"5.2 Marking and labeling. In addition to the marking specified in PPP-P-1892, individual cans and containers (see 5.2.1) shall bear printed labels showing the following nomenclature and information, as applicable:

- Component Identification
 - Component A - Base component
 - Component B - Curing component
- Specification MIL-P-85582B, Type I or II, Class C1, C2, or N (as applicable)
- Manufacturer's name and product number
- Date of manufacture by month and year
- Batch number/net contents
- VOC content in grams/liter
- Mixing and thinning instructions

The following is to be included on a printed sheet with each kit:

- Precautions
 - a. The surface to be coated must be clean (free of oil, dust, etc.)
 - b. Spray equipment must be adequately grounded. Clean equipment immediately after use.
 - c. Mix only the amount of primer coating to be used within 4 hours.
 - d. Primer coating from one vendor, or individual component, shall never be mixed with that of another vendor.
 - e. Apply over pretreated metal. On fiberglass-reinforced plastic surfaces, a prior coating of metal pretreatment conforming to MIL-C-8514 will facilitate stripping without damage to the fiberglass."

**MIL-P-85582B
INTERIM AMENDMENT 1 (AS)**

PAGE 21

6.2: DELETE and SUBSTITUTE:

"6.2. Acquisition requirements. Acquisition documents should specify the following:

- a. Title, number, and date of this specification, including any amendments.
- b. Classification (Type I or II, and Class 1A, 1B, or 2, as applicable) (see 1.2 and 6.7).
- c. Issue of DODISS to be cited in the solicitation, and, if required, the specific issue of individual documents referenced (see 2.1 and 2.2).
- d. Data requirements (see 6.3).
- e. Quantity and kit size (see 6.7.1).
- f. Levels of packaging and packing required (see 5.1).
- g. Marking and labeling required (see 5.2 through 5.2.1.2).
- h. Specify if palletization is required.
- i. Acceptance criteria (see 6.11 and 6.12).
- j. FAR clauses 23.303 and 52.223-3."

PAGE 22

6.3: DELETE and SUBSTITUTE:

"6.3 Consideration of data requirements. The following Data Item Descriptions (DID's) must be listed, as applicable, on the Contract Data Requirements List (DD Form 1423) when this specification is applied on a contract, in order to obtain the data, except where DOD FAR Supplement 227.405-70 exempts the requirement for a DD Form 1423.

Reference Paragraph	DID Number	DID Title	Suggested Tailoring
4.3.2	DI-MDTI-80809A	Test/Inspection Reports	---
3.3, 4.3.2, 4.4.2	DI-MISC-80809A	Certification Data Sheet	10.2.7

The above DID's were those cleared as of the date of this specification. The current issue of DOD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSOL), must be researched to ensure that only current, cleared DID's are cited on the DD Form 1423."

MIL-P-85582B
INTERIM AMENDMENT 1 (AS)

PAGE 23

6.7: DELETE and SUBSTITUTE:

"6.7 Part numbers. Part numbers for cataloging purposes under this specification may be coded as follows:

<u>M85582</u>	-	<u>X</u>	-	<u>XX</u>	-	<u>XXXX</u>	
<div style="position: absolute; bottom: 0; left: 0; right: 0;">Specification identifier</div>		<div style="position: absolute; bottom: 0; left: 0; right: 0;">Type designer (1 = Type I, 2 = Type II)</div>		<div style="position: absolute; bottom: 0; left: 0; right: 0;">Class designator (C1, C2, or N0)</div>		<div style="position: absolute; bottom: 0; left: 0; right: 0;">Kit size designator (see 6.7.1)</div>	

6.10: DELETE and SUBSTITUTE:

"6.10 Cross-reference of classes from this MIL-P-85582A to MIL-P-85582B. Class 1 of MIL-P-85582A is Class C1 of MIL-P-85582B. Class 2 of MIL-P-85582A is Class C2 of MIL-P-85582B. MIL-P-85582B, Class N, was not covered by MIL-P-85582A."

Preparing activity:
Navy - AS
(Project No. 8010-N797)