

NOT MEASUREMENT  
SENSITIVE

MIL-A-8625F  
AMENDMENT 1  
15 September 2003

## MILITARY SPECIFICATION

### ANODIC COATINGS FOR ALUMINUM AND ALUMINUM ALLOYS

This amendment forms a part of MIL-A-8625F, dated 10 September 1993, and is approved for use by all Departments and Agencies of the Department of Defense.

#### PAGE 2

2.1.1, under SPECIFICATIONS, MILITARY: Delete “MIL-C-81706 – Chemical Conversion Materials for Coating Aluminum and Aluminum Alloys.”

#### PAGE 3

3.3.1.2, line 7: Delete “IA...” and substitute “IB.”

#### PAGE 4

3.3.1.2: Change paragraph number to “3.3.1.3.” In line 4, delete “IA” and substitute “IB.”

#### PAGE 5

Add: “3.4.2.2 Photosensitized (identification) nameplates. When type II anodic coatings are specified for use in photosensitized nameplates, oxalic acid anodizing may be used in lieu of sulfuric acid anodizing. If oxalic acid anodizing is used, the resultant coating shall meet the requirements of this specification for type II anodic coatings. If copy and background color are added to photosensitive nameplates, silver compounds or dyes shall be used. Unprocessed photosensitive aluminum shall be classified as class 1. Nameplates made from photosensitive aluminum shall be classified as class 2.”

AMSC N/A

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3.7.1.2c: Delete and substitute:

“c. In addition to the requirements in a and b above, types I and IB test specimens that exhibit large areas of gross discoloration (dark grey areas) shall meet the following additional requirement. The total number and per panel number of pits used to verify that the requirements of a and b above are met shall be determined by adding the number of pits found with the unaided eye to the number of pits found in the areas of gross discoloration determined when examined at a magnification of 10X. This requirement does not apply to areas of slight discoloration or fading such as those areas that may result from chromate leaching during salt spray exposure.”

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TABLE II: Add “2/ III” to column 2, row 3, Applicable type I, IB, IC, II, IIB.  
Add the following footnote below the table “2/ Type III coatings shall be tested for corrosion resistance only when it is specified that the coating is sealed.”

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4.3.3.2.3: Delete and substitute: “4.3.3.2.3 Test specimens for corrosion and light fastness resistance. Corrosion resistance shall be determined on undyed and sealed production parts or specimen panels (see 4.3.3.2). When light fastness testing is specified (see 6.2), it shall be performed on dyed and sealed (class 2) production parts or specimen panels (see 4.3.3.2). When specimen panels are used, they shall have a width of not less than 3 inches, a length of not less than 10 inches, and a nominal thickness of not less than 0.032 inch.

PAGE 13

6.1, line 2: Delete “yipvide” and substitute “provide.”

6.1.1, line 7: Change “MIL-C-81706” to “MIL-DTL-81706.”

PAGE 18

6.16, lines 2 and 4: Change “silicone” to “silicon.”

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Delete 6.23 and substitute:

“6.23 Subject term (key word) listing.

Anodizing  
Chromates  
Chromic acid  
Phosphoric acid  
Potassium dichromate  
Sodium dichromate  
Sulfuric acid

Custodians:

Army – MR

Navy – AS

Air Force – 11

Preparing activity:

Navy - AS

(Project MFFP-0698)

Review activities:

Army – AR, AV, AT, CR, CR4, MI

Navy – OS, SH

Air Force – 70, 71, 99