

MIL-C-22750D
AMENDMENT 3
15 June 1984
SUPERSEDING
INT. AMENDMENT 2 (AS)
12 November 1982

MILITARY SPECIFICATION

COATING, EPOXY-POLYAMIDE

This amendment forms a part of Military Specification MIL-C-22750D dated 3 November 1980, and is approved for use by all Departments and Agencies of the Department of Defense.

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1.2. Add the following Federal Standard No. 595 color numbers:

"13538, 34095 (Type II coating) (Field green), 35237, 36320, 36375, 36495."

1.2.2. Delete entire paragraph.

Add "1.2.2 Classification. The epoxy-polyamide coating shall be furnished in the following types as specified:

Type I - Standard epoxy-polyamide coating
Type II - Low infrared reflective epoxy-polyamide coating."

2.1. Delete "MIL-T-19544 - Thinner, Acrylic-Nitrocellulose Lacquer."

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2.2. Add the following:

"ASTM D 1200 - Viscosity of Paints, Varnishes, and Lacquers by Ford Viscosity Cup
ASTM D 3335 - Low Concentrations of Lead, Cadmium and Cobalt in Paint by Atomic Absorption Spectroscopy
ASTM E 97 - 45-deg, 0-deg. Directional Reflectance of Opaque Specimens by Filter Photometry"

2.2. Delete the following:

"ASTM D 562 - Consistency of Paints Using the Stormer Viscometer, Test for"

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3.2. Add after last sentence: "The formulation of the Type I coating shall be free from the use of lead (less than 0.06% as determined in 4.6.1)."

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3.3, Delete second sentence and substitute: "Component I shall have a minimum pigment content of 15% by weight as determined in 4.6.1. The admixed coating shall have a minimum nonvolatile content of 43% by weight as determined in 4.6.1."

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3.5, Delete Table I.

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3.5.3, Delete and substitute: "3.5.3 Viscosity. The viscosity determined one hour after mixing, shall be a minimum of 16 seconds, using a No. 4 Ford Cup. (see 4.6.1)."

3.6.2, Delete and substitute: "3.6.2 Gloss. Gloss values of the Type I epoxy-polyamide coating shall be as specified in Table II. Specular gloss of the Type II epoxy-polyamide coating shall be as specified in Table IV."

3.6.2, Delete Table II.

Add the following:

"TABLE II. Gloss values (60° geometry)."

| | Minimum | Maximum |
|-------------------|---------|---------|
| Gloss colors | 90 | - |
| Semi-gloss colors | 15 | 30 |
| Lusterless colors | - | 8 |

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3.6.3, Delete entire paragraph.

3.6.3.1, line 1, delete "(white only)". Line 2, delete "white" and substitute "the".

Add the following: "3.6.3.2 Color (For Field Green Only) by photoelectric tristimulus. The tristimulus values shall be as follows (see 4.8):

$$\begin{aligned} X &= 6.74 \pm 10\% \\ Y &= 7.69 \pm 10\% \\ Z &= 5.11 \pm 10\% \end{aligned}$$

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3.6.3.3 Total reflectance (field green only). The maximum percent infrared reflectance relative to magnesium oxide shall conform to the following spectrophotometric limits when tested as specified in 4.9.

| <u>Wavelength in millimicrons</u> | <u>Maximum percent total reflectance</u> |
|---------------------------------------|--|
| 450-500 | 8 |
| 500-600 | 10 |
| 600-2700 | 8 |

3.6.4, line 2, delete "1.0 to 1.2" and substitute "1.5 to 2.0."

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3.10, Delete and substitute: "Flexibility. At room temperature, the film shall exhibit no cracking, peeling or loss of adhesion when bent coated side away, over a 1/8 inch mandrel (gloss colors) or a 1/4 inch mandrel (lusterless colors) as described in 4.6.1."

4.3.1.2, line 6, delete "0.0016 \pm 0.0002 inch" and substitute "1.5 to 2.0 mils."

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TABLE III, column 1, line 2: delete "(Stormer)"

4.6.1, third line from bottom: delete "(Stormer)". Delete "D562" and add "D1200."

4.6.1, Add "Lead content - D3335".

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Add the following: "4.8 45 degree/0 degree directional reflectance for Type II coating. 45 degree/0 degree directional reflectance for type II coating shall conform to ASTM E 97.

4.9 Total reflectance. The infrared reflectance of the panel, when measured on a suitable spectrophotometer, shall conform to the limits specified in 3.6.3.3."

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Add the following at the end of the specification:

"TABLE IV. Specular gloss, Type II coating.

| 60 degrees maximum | 85 degrees maximum |
|-----------------------|-----------------------|
| 3 | 5 |

NOTE: 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.

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Army - ME
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Preparing activity:

Navy - AS
(Proj. No. 8010-1089)

Review activities:

Army - AR, EA, MI, MR
Navy - OS, MC
DS

User activity:

Navy - EC