

TT-E-496B  
AMENDMENT - 3  
January 29, 1985  
SUPERSEDING  
Amendment - 2  
August 22, 1972

FEDERAL SPECIFICATION

ENAMEL, HEAT-RESISTING (400°F, BLACK)

This amendment, which forms a part of Federal Specification TT-E-496B, dated May 11, 1967, is approved by the Assistant Administrator, Office of Federal Supply and Services, General Services Administration, for the use of all Federal agencies.

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Paragraph 2.1, under Federal Specifications: Change "TT-P-143" to "PPP-P-1892"  
Delete "VV-G-109 - Gasoline, Unleaded"  
Add "VV-G-1690 - Gasoline, Automotive, Leaded or Unleaded"

Add paragraph 2.2 as follows:

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless a specific issue is identified, the issue in effect on the date of invitation for bids or request for proposal shall apply.

American Society for Testing and Materials (ASTM) Standards:

- D 523 - Specular Gloss
- D 1208 - Common Properties of Certain Pigments
- D 1210 - ~~Fineness of Dispersion of Pigment-Vehicle Systems~~
- D 1296 - Odor of Volatile Solvents and Diluents
- D 2698 - Pigment Content of Solvent-Type Paints by High-Speed Centrifuging
- D 2805 - Hiding Power of Paints
- D 3278 - Flashpoint of Liquids by Setflash Closed Tester
- D 3335 - Low Concentrations of Lead, Cadmium, and Cobalt in Paint by Atomic Absorption Spectroscopy

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

South Coast Air Quality Management District Rules and Regulations:

Rule 102 - Definitions

(Application for copies should be addressed to the South Coast Air Quality Management District, 9150 Flair Drive, El Monte, CA 91131.)

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Add paragraph 3.2.3 as follows:

3.2.3 Solvent. The volatile organic solvent used shall not be photochemically reactive as defined in South Coast Air Quality Management District Rule 102.

Table I, Drying time: Delete "6" under minimum for each type and add "6" under maximum for each type.

Add "Lead, percent mass of nonvolatile" under characteristics and "0.06" under maximum.

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Paragraph 4.3.2. Add "and ASTM methods" after "141".

Paragraph 4.3.4, lines 1 and 2. Change "method 4401 of Fed. Test Method Std. No. 141" to "ASTM D 1296".

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Paragraph 4.3.11, line 4. Change "VV-G-109" to "VV-G-1690".

Paragraph 4.3.15. Change "Drying properties" to "Drying and baking properties".

Delete "4.3.16 Baking properties". Wording beginning with "Type II" is part of 4.3.15.

Add new paragraph 4.3.17 as follows:

4.3.17 Specular gloss. Draw down the enamel on plane, opaque, white glass panels specified in 2.1.5 of method 2021 of Fed. Test Method Std. No. 141 with a film applicator to produce a wet film thickness of  $76 \pm 2 \mu\text{m}$  ( $0.003 \pm 0.0001$  inch). Determine  $60^\circ$  specular gloss in accordance with ASTM D 523 after 48 hours drying at  $23 \pm 1^\circ\text{C}$  ( $73 \pm 2^\circ\text{F}$ ) and a relative humidity of  $50 \pm 4$  percent.

Add new paragraph 4.3.18 as follows:

4.3.18 Lead content. Determine lead in accordance with ASTM D 3335 or by the use of an X-ray fluorescence spectrometer capable of determining lead at a minimum range of 0.03 through 1.0 percent mass of nonvolatile with an accuracy within plus or minus 5.0 percent. The X-ray method shall be used in case of dispute.

Table II. Delete and substitute:

TABLE II

Characteristics	Requirement Reference	Test Methods		Paragraph Reference
		Fed. Test Method Std. No. 141	ASTM Method	
Nonvolatile	Table I	4053	---	---
Pigment	Table I	---	D 2698	---
Drying time	Table I	---	---	4.3.15
Ash	Table I	---	D 1208	---
Flash point	Table I	---	D 3278	---
Fineness of grind	Table I	---	D 1210	---
Specular gloss	Table I	---	D 523	4.3.17
Hiding power (contrast ratio)	Table I	---	D 2805 (1)	---
Water content	Table I	4081	---	---
Lead content	Table I	---	D 3335	4.3.18
Condition in container	3.4.1	3011	---	4.3.3
Odor	3.4.2	---	D 1296	4.3.4
Brushing, covering and leveling	3.4.3	---	---	4.3.5
Color	3.4.4	---	---	4.3.6
Flexibility	3.4.5	6221	---	4.3.7
Knife test	3.4.6	6304	---	4.3.8
Recoating	3.4.7	---	---	4.3.9
Reducibility	3.4.8	---	---	4.3.10
Gasoline resistance	3.4.9	---	---	4.3.11
Hot water resistance	3.4.10	---	---	4.3.12
Heat resistance	3.4.11	---	---	4.3.13
Shock resistance	3.4.12	---	---	4.3.14
Baking properties	3.4.13	---	---	4.3.15

(1) At a dry film thickness of  $25 \pm 2 \mu\text{m}$  ( $0.001 \pm 0.0001$  inch)

Paragraph 5.1, line 2. Change "TT-P-143" to "PPP-P-1892".

MILITARY INTEREST:

CIVIL AGENCY INTEREST

MILITARY COORDINATING ACTIVITY:

COM - NBS

Army - ME

PREPARING ACTIVITY

CUSTODIAN

GSA - FSS

Army - ME

REVIEW ACTIVITIES

Army - MI, AR