

TT-P-30E
June 30, 1977
SUPERSEDING
Fed. Spec. TT-P-30D
June 27, 1967

FEDERAL SPECIFICATION

PAINT, ALKYD, ORDORLESS, INTERIOR, FLAT
WHITE AND TINTS

This specification was approved by the Commissioner,
Federal Supply Service, General Services Administration,
for the use or all Federal agencies.

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers two types or ready-mixed odorless, alkyd, interior, flat paint used as a decorative and protective coating on interior walls and ceilings.

1.2 Classification. The paint shall be or the following types.

- Type I - Tints (pastel) and whites (colors 37875 and 37778) specified by reference to Fed. Std. No. 595.
- Type II - A high-hiding white (no color number), suitable for use as is or as a tint-base (see 3.3.2 and 6.4).

2. APPLICABLE DOCUMENTS

2.1 The following documents, of the issues in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

Federal Specifications:

- L-S-626 - Sponges, Synthetic.
- SS-L-30 - Lath and Board Products, Gypsum.
- TT-E-545 - Enamel, Odorless, Alkyd, Interior Undercoat, Tints and White.
- PPP-P-1892- Paint, Varnish, Lacquer and Related Materials; Packaging, Packing, and Marking of.
- PPP-T-60 - Tape, Packaging, Waterproof.

Federal Standards:

- Fed. Test Method Std. No. 141 - Paint, Varnish, Lacquer and Related Materials; Methods of Inspection, Sampling, and Testing.
- Fed. Std. No. 595 - Colors.

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and Standards and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

(Single copies of this specification and other Federal Specifications required by activities outside the Federal Government for bidding purposes are available without charge from Business Service Centers at the General

Services Administration Regional Offices in Boston, New York, Washington, DC, Atlanta, Chicago, Kansas City, MO, Fort Worth, Denver, San Francisco, Los Angeles, and Seattle, WA.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.)

FSC 8010

TT-P-30E

Military Standards:

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.

(Copies of Military Specifications and Standards required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

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 date of invitation for bids or request for proposal shall apply.

American Society for Testing and Materials (ASTM) Standards:

D 185 - Coarse Particles in Pigments, Pastes, and Paints
 D 562 - Consistency of Paints Using The Stormer Viscosimeter
 D 563 - Phthalic Anhydride Content of Alkyd Resins and Resin Solutions
 D 1078- Distillation Range of Volatile Organic Liquids
 D 1133- Kauri-Butanol Value of Hydrocarbon Solvents
 D 1210- Fineness of Dispersion of Pigment Vehicle System
 D 1296- Odor of Volatile Solvents and Diluents
 D 1542- Qualitative Tests for Rosin in Varnishes
 D 2486- Scrub Resistance of Interior Latex Flat Wall Paints
 D 2801- Leveling Characteristics of Paint by Draw-Down Method
 D 3278- Flash Point of Liquids by Setaflash Closed Tester
 E 97 - Daylight Directional Reflectance

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

3. REQUIREMENTS

3.1 Material. The paint as received shall be ready-mixed, consisting of pigment or pigments and vehicle specified, so combined as to produce a paint meeting all the requirements of this specification.

3.2 Composition.

3.2.1 Pigments. Any suitable pigment or combination of pigments including extenders and tinting pigments may be used, provided the paint meets all the requirements specified herein.

3.2.2 Vehicle. The vehicle shall be a drying-oil alkyd combined with one or more odorless solvents. The volatile portion of the vehicle shall be an odorless thinner or a combination of odorless thinners. The thinner or combination of thinners shall have the high-and-low boiling properties specified in Table I.

TABLE I. Physical properties or thinners

Properties	Low boiling	High boiling
Distillation:		
Initial boiling point, deg. C	171-180	199-210
Fifty percent boiling off, deg. C	179 to 188	210 to 220

Dry end point, deg. C	190 to 200	216 to 232
Final end point, deg. C	196 to 200	216 to 232
Flash point, deg. C	52 to 54	71 to 82
Kauri butanol value	-32 to -33	-30 to -31

3.3 Qualitative requirements.

3.3.1 Condition in container. The paint shall be thoroughly mixed and ground. It shall not be settled, caked, or thickened to such a degree that it cannot be redispersed easily with a paddle to a good brushing consistency when tested as in 4.3.1.

3.3.2 Color. The color of all type I paint specified in the contract or order (see 6.2) shall match that of the standard color chip in Fed. Std. No. 595 when tested as specified in 4.3.2. Type II (tint-base) shall meet the directional reflectance specified in table II when tested as specified in table IV.

3.3.3 Storage stability.

3.3.3.1 Partially full container. The paint shall not skin within 48 hours when tested as in 4.3.3.1.

3.3.3.2 Full container. When stored for one year and tested as in 4.3.3.2, the paint shall not show livering, caking, skinning, or a change of viscosity from that specified in Table II.

3.3.4 Odor. The odor in the can, during application, and after drying shall not be irritating or offensive when tested as in 4.3.4.

3.3.5 Brushing properties. When tested as in 4.3.5, the paint shall brush satisfactorily without drag on the brush, and shall show no lap marks, running, sagging, or streaking. The dried film shall show no dusting, mottling, or color separation, and shall present a smooth uniform finish free from seeds.

3.3.6 Spraying properties. The paint, when tested as in 4.3.6, shall spray satisfactorily in all respects and shall not run, sag, or streak. The dried film shall show no dusting, floating, bubbling, or orange peeling.

3.3.7 Roller coating. When the paint is applied by roller and tested as in 4.3.7, it shall show no sagging, running, or streaking. The dried film shall show no lapping, localized floating, or unevenness of film.

3.3.8 Flexibility. The paint shall show no evidence of cracking when subjected to the flexibility test as specified in 4.3.8.

3.3.9 Washability. When tested as specified in 4.3.9, the soiling mixture shall be substantially removed from the paint film without any exposure of the undercoat. The reflectance of the cleaned area shall be not less than 95 percent of the value measured on the unsoiled area before the test; the 85 deg. specular gloss of the washed area shall be not greater than 125 percent of the original value. The color of the washed film shall not be different from that of the unwashed area.

3.3.10 Recoating properties. A film of the paint, when tested as in 4.3.10, shall not be self-lifting, and shall show no evidence of bubbling, wrinkling, pinholing, cratering, orange peel, or other film irregularities.

3.3.11 Resistance to sagging. The paint, when tested as in 4.3.11, shall have a rating of "No Sag."

3.3.12 Rosin and rosin derivative. Rosin and rosin derivatives shall not be present when tested as in table IV.

3.3.13 Compatibility (type II only). When tested as specified in 4.3.12, the dried film shall show uniform color, an 85 deg. gloss between 3 and 8, and no streaks, craters, or pigment floating.

3.3.14 Scrub resistance. The film shall not be worn through to the panel in fewer than 400 cycles (800 separate strokes), when tested as specified in 4.3.14.

3.4 Quantitative requirements.

3.4.1 The quantitative requirements shall be as specified in Table II.

TT-P-30E

TABLE II. Quantitative requirements of nonpenetrating flat paint

Characteristics	Requirements	
	Minimum	Maximum
Pigment, percent by weight of paint-----	53	--
Nonvolatile vehicle, percent by weight of vehicle-----	26	--
Phthalic anhydride, percent by weight of nonvolatile vehicle-----	23	--
Water, percent by weight of paint-----	--	1.0
Coarse particles and skins (residue retained on U.S. No. 325 sieve), percent by weight of pigment-----	--	2.0
Fineness of grind-----	4	--
Consistency, Krebs-Stormer, Shearing rate 200 r.p.m.:		
Grams-----	200	475
Equivalent K.U.-----	82	110
Drying Time:		
Time to set-to-touch, hours-----	1/2	2
Time to dry, hours-----	--	7
85 deg. Specular gloss (without correction for diffuse reflectance)-----	--	8
Daylight 45 deg., 0 deg. directional reflectance (type II only)--	84	--
Absorption, inch-----	--	1/16
Yellowness index difference (after accelerated yellowing), (type I, only color 37875; and type II)-----	--	0.10
Lead, percent by weight of nonvolatile matter-----	--	0.06

3.4.2 Dry opacity. Not more than 6 milliliters per square foot (630 square feet per gallon) of white (type I and type II) paint (minimum apparent reflectivity 84 percent) shall be required to give a dry-film contrast ratio of 0.95. The minimum dry-film contrast ratio for tints (type I) applied to the same wet-film thickness, in terms of apparent reflectivity, shall be as specified in Table II.

TABLE III. Minimum dry-film contrast ratios for tints

Apparent reflectivity of tint (percent)	Contrast ratio
84 and higher	0.95
80-83	0.96
76-79	0.97
70-75	0.98
60-69	0.99
59 and lower	1.00

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the contractor may use his own or any other facilities suitable for the performance of the inspection

requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to prescribed requirements.

4.2 Sampling and Inspection.

4.2.1 Inspection of preparation for delivery. The packaging, packing and marking shall be examined in accordance with the requirements of PPP-P-1892.

4.2.2 Testing of the end item.

4.2.2.1 Lot. The paint shall be assembled into lots as specified in MIL-STD-105. In MIL-STD-105, the words "essentially the same conditions" shall be interpreted to mean as manufacturer's batch, which is defined as the end product of all raw materials mixed, blended, or processed in a single operation.

4.2.2.2 Sampling of the end item for tests. For the purposes of sampling, the lot shall be expressed in units of gallons. Samples from lots shall be taken in accordance with MIL-STD-105 using inspection level S-2 and an acceptable quality level (AQL) of 2.5.

4.2.2.3 The contractor shall submit a certificate of compliance indicating that the paint complies with the storage stability requirement specified in 3.3.3.2. The Government reserves the right to test the paint to determine the validity of the certificate.

4.3 Test methods. All tests shall be conducted in accordance with the methods specified in Table IV to determine compliance with the requirements of section 3. Unless otherwise specified, standard testing conditions are 23 deg. +/- 1 deg. C and a relative humidity of 50 +/- 5 percent. All test reports shall contain the individual values utilized in expressing the final result. Failure to pass any test, or noncompliance with any requirement shall be cause for rejection or the sample.

TABLE IV. Index or test methods

Characteristics	Requirements Reference	Applicable Tests		Paragraph Reference
		Fed. Test Method No. 141	Std. ASTM	
Condition in container	3.3.1	3011	----	4.3.1
Color	3.3.2	4250	----	4.3.2
Storage stability	3.3.3	3021, 3022	----	4.3.3
Odor	3.3.4	----	D 1296	4.3.4
Brushing properties	3.3.5	4321	----	4.3.5
Spraying properties	3.3.6	4331	----	4.3.6
Roller coating properties	3.3.7	4335	----	4.3.7
Flexibility	3.3.8	6221	----	4.3.8
Washability properties	3.3.9	----	----	4.3.9
Recoating	3.3.10	----	----	4.3.10
Resistance to sagging	3.3.11	----	D 2801	4.3.11
Rosin and derivatives	3.3.12	----	D 1542	-----
Compatibility	3.3.13	----	----	4.3.12
Scrub resistance	3.3.14	----	D 2486	4.3.14
Distillation	Table I	----	D 1078	-----
Flash point	Table I	----	D 3278	-----
Kauri-butanol value	Table I	----	D 1133	-----
Pigment	Table II	4021	----	-----
Nonvolatile vehicle	Table II	4053	----	-----
Water	Table II	4081	----	-----
Coarse particles	Table II	----	D 185	-----
Fineness of grind	Table II	----	D 1210	-----
Consistency	Table II	----	D 562	-----
Drying time	Table II	4061	----	-----
Gloss	Table II	6103	----	-----

Directional reflectance	Table II	----	E 97	-----
Absorption	Table II	4421	----	-----
Yellowness	Table II	6132	----	-----
Lead content	Table II	----	----	4.3.13
Phthalic anhydride	Table II	----	D 563	-----
Hiding power (contrast ratio)	Table III	4121	----	-----

4.3.1 Condition in container. Determine the packaged condition of the paint in accordance with method 3011 of Fed. Test Method Std. No. 141, and evaluate for compliance with 3.3.1.

TT-P-30E

4.3.2 Color. The film shall be applied on a smooth, flat chart in successive coats, each having a dry-film thickness of 0.076 mm (0.003 in), until complete hiding is achieved, and shall be allowed to dry for 24 hours at standard conditions. Determine the color of the dried film in accordance with method 4250 of Fed. Test Method Std. No. 141, and evaluate for compliance with 3.3.2.

4.3.3 Storage stability.

4.3.3.1 Partially full container. Determine the 48-hour skinning in accordance with method 3021 of Fed. Test Method Std. No. 141, and evaluate for compliance with 3.3.3.1.

4.3.3.2 Full container. In accordance with method 3022 of Fed. Test Method Std. No. 141 allow a full quart can of the paint to stand undisturbed for 12 months, and then examine the contents. Evaluate pigment settling or caking but agitate the can for 5 minutes on the paint shaker prior to re-examination. Make other applicable tests for compliance with 3.3.3.2.

4.3.4 Odor. Observe the odor in the can, during application, and after the paint has dried for 24 hours, and evaluate for compliance with 3.3.4. Seventy-two hours after application, the paint shall be completely odorless.

4.3.5 Brushing properties. Determine brushing properties in accordance with section 4.2 of method 4321 of Fed. Test Method Std. No. 141, and evaluate for compliance with 3.3.5.

4.3.6 Spraying properties. In accordance with method 4331 of Fed. Test Method Std. No. 141, observe spraying properties, and evaluate for compliance with 3.3.6.

4.3.7 Roller coating properties. Observe roller coating properties in accordance with method 4335 of Fed. Test Method No. 141, and evaluate for compliance with 3.3.7.

4.3.8 Flexibility. Apply a film with a 51 mm (0.002 in) dry film on steel panel prepared in accordance with method 2011 of Fed. Test Method No. 141. Air dry for 18 hours, bake for 5 hours at 150 deg. C, cool to 23 deg. C for 1/2 hour, bend double rapidly over a 1/2-inch mandrel, examine, and evaluate for compliance with 3.3.8.

4.3.9 Washability properties. Prepare two panels in accordance with method 6142 of Fed. Test Method Std. No. 141, except use enamel conforming to TT-E-545 as an undercoat. Using method 6141 of Fed. Test Method Std. No. 141, perform the washability test on each prepared panel as follows:

- (1) Lava soap or equal may be used.
- (2) Use a sponge conforming to L-S-626, type II, porosity B, with dimensions of 95 x 23 x 38 mm (3-3/4 x 2-7/8 x 1-1/2 in) when wet, and a suitable sponge holder weighing 454 g. The direction of least compressibility of the sponge shall be in the 38-mm dimension.
- (3) The stroke length of the tester shall be 380 mm (15 in).
- (4) Add additional soap and water to the sponge after every 25 cycles until a total of 100 cycles has been run.
- (5) Measure the 85 deg. gloss in accordance with method 6103 of Fed. Test Method Std. No. 141, instead of the 60 deg. gloss as described in method 6141 of Fed. Test Method Std. No. 141.
- (6) Measure the directional reflectance according to ASTM E 97. Examine and evaluate for compliance with 3.3.9.

4.3.10 Recoating properties. Brush a coat of the paint on a clean wallboard panel conforming to SS-L-30 to a dry film thickness 37 mm (.0015 in). Allow to dry in a horizontal position for 24 hours at standard conditions. Apply a second coat cross-wise to the first coat, then air dry as before. After 24 hours of drying, evaluate for compliance with 3.3.10.

4.3.11 Resistance to sagging. Determine the nonsagging property of the paint in accordance with ASTM D 2801. The paint shall be applied at a spreading rate of approximately 400 square feet per gallon. Evaluate for compliance with 3.3.11.

4.3.12 Compatibility test (type II only). In a beaker containing approximately 100 ml of type II paint, place 2.0 g of tinting medium concentrate conforming to TT-T-390, color 2a. Stir thoroughly until the tinting concentrate is evenly dispersed to a homogeneous mixture. Allow the mixture to stand undisturbed for 5 minutes. On one clear plate-glass panel, prepared in accordance with method 2021 of Fed. Test Method Std. No. 141, brush a coat of the mixture to approximately 25 μm (0.001 in) dry film thickness, and allow to dry at standard conditions in a vertical position for 24 hours. While brushing, observe for streaks and pigment separation. On another panel prepared in the same way, draw down a 51 μm (0.002 in) wet film thickness of the mixture. While the paint is still wet, rub-up an area using the index finger in circular motion and continue for a minimum of 20 revolutions. Exert light pressure of the finger while rubbing so as not to rub off the film. Allow the paint film to dry at standard conditions for 24 hours. Examine the dried film, and compare the rubbed-up area against the unrubbed-up area. A difference in color or 85 deg. gloss (tested in accordance with method 6103 of Fed. Test Method Std. No. 141A), of the dried film between these areas shall constitute incompatibility. Evaluate for conformance with 3.3.13.

4.3.13 Lead content.

4.3.13.1 Sample preparation. Using a 0.006-inch film applicator and a mechanical applicator plate, duplicate drawdowns for each sample of well-mixed paint shall be made on a standard paint penetration chart and dried for 24 hours. The drawdown shall be at least 10 inches long on the sealed portion of the penetration chart. The drawdown shall be cut into discs of appropriate size to fit the sample holder of a fluorescence X-ray spectrometer.

4.3.13.2 Procedure. Lead content shall be determined using an X-ray fluorescence spectrometer capable of determining lead content at a minimum level of 0.03 percent by weight of the total nonvolatile. The settings for a wavelength dispersion fluorescence spectrometer shall be as follows:[1]

Element	Analytical Line	Angle	Crystal	Detection	Collimeter	X-ray tube (MO)	
Pb	L	33.93	LiF(200)	Flow S.C.	Fine	60Kv	45Ma
Pb (backgrd I)		33.00	LiF(200)	Flow S.C.	Fine	60Kv	45Ma
Pb (backgrd II)		35.50	LiF(200)	Flow S.C.	Fine	60Kv	45Ma
Mo	K	20.33	LiF(200)	Flow S.C.	Fine	60Kv	45Ma

Pulse height selection shall be used in all measurements and counting time shall be 100 seconds. Place the sample disc in the wavelength dispersion unit. Measure the count rates of lead, lead background, and the Molybdenum Compton scattered background from the X-ray tube.

4.3.13.3 Calculation.

$$R = \frac{I_{\text{Pb}\gamma} - I_{\text{Pb}\gamma} (\text{Background I}) + I_{\text{Pb}\gamma} (\text{Background II})}{2 I_{\text{Mo}\gamma}}$$

where I equals gross intensity.

These results shall be compared to those obtained with a 0.06 percent lead standard made up from the same type of paint sample and evaluated for compliance with Table II.

[1] Energy dispersive fluorescence spectrometers shall be set up according to the manufacturer's manual.

TT-P-30E

4.3.14 Scrub resistance. Determine the scrub resistance of the paint film in accordance with ASTM D 2486, except:

1. Use a sponge [1] conforming to L-S-626, type II, porosity B, with dimensions of 95 x 73 x 38 mm (3-3/4 x 2-7/8 x 1-1/2 inches) when wet. The direction of least compressibility shall be in the 1-1/2 inch dimension. Soak the sponge for 30 minutes in distilled water at ambient laboratory temperatures, squeeze dry with maximum hand pressure, and evenly distribute 50 ml of distilled water over the surface of the sponge. Do not wet the panel with additional water. Spread 10 g of the specified scrub medium evenly over the wearing surface of the sponge. Recharge the sponge with 10 g of scrub medium after each 100 strokes.'

2. Use a holder weighing 454 g (1.0 lb) suitable for holding the sponge. The apparatus used shall have a stroke length of 380 mm (15.0 inches). Evaluate for compliance with 3.3.14.

5. PREPARATION FOR DELIVERY

5.1 Packaging, backing, and marking. When specified, the paint shall be packaged, packed, and marked in accordance with PPP-P-1892. Unless otherwise specified, commercial packaging and packing shall be used (see 6.2). The paint shall be furnished in one quart metal cans, one gallon metal cans, five gallon metal pails, or 55 gallon steel drums as specified (see 6.2).

5.2 Precautionary markings. In addition to the markings required by PPP-P-1892, all individual containers shall have the following marking:

"CAUTION: Adequate precautions should be taken when spraying. Provide adequate ventilation during application. This paint has a faint odor which may not be readily noticed. Keep away from flames".

5.3 Direction for use. The directions for use, which shall be clearly legible, shall be shown on the reverse side of the container and shall read as follows:

"All surfaces to be painted shall be clean, smooth, and dry. Inasmuch as this paint is an odorless product, it may be used as a primer-sealer as well as a finish coat in order to preserve the odorless characteristics. New dry plaster surfaces shall be given a coat of this material as a primer. After the primer is thoroughly dry, the second or finish coat may be applied. One-coat application on wallboard is sometimes feasible, but two coats may be required. Priming directions in such cases are the same as for new plaster. Interior masonry should be dry, and usually requires two coats of a special alkali-resistant primer, if portland cement is present, to prepare the surface for painting. Old surfaces which are in good condition and are not dirty may often be recoated directly with this paint. Otherwise, the directions for painting new surfaces should be followed. New plaster patches or spackled areas should first be spot-primed before applying the finish coat. The spreading rate of this paint is approximately 450 square feet per gallon as a finish coat and about 400 square feet per gallon as a primer. Overnight drying should be allowed before applying a second coat."

5.3.1 The manufacturer shall furnish specific directions for spray application.

6. NOTES

6.1 Intended use. Paint covered by this specification is intended for general interior use on walls and ceilings where an odorless paint is

required. This paint is ready for use as received without thinning, except for spraying where thinning instructions from the supplier are necessary.

6.2 Ordering data, Purchasers should select the preferred options permitted herein and include the following information in procurement documents:

- (a) Title, number, and date of this specification.
- (b) Type required (see 1.2).
- (c) Site of container required (see sec. 5.1).
- (d) Color required (see 3.3.2).
- (e) Selection of applicable levels of packaging and packing (see 5.1).

6.3 Odorless alkyd flat paint has good washability for a flat paint but, nevertheless, should not be used in kitchens, bathrooms, and under other conditions where it would be subjected to repeated washings. It is best suited for use as a decorative coating in living rooms, dining rooms, and bedrooms of residences, and in offices and halls (but not dados) or public buildings. Semigloss enamel (TT-E-508) and gloss enamel (TT-E-506) should be used where the highest degree of washability is required. Interior flat latex paint conforming to TT-P-29 may be used as an alternative to this paint.

6.4 The type II tint-base white paint is a high hiding white paint which can be tinted to the desired light color before application. This paint can also be used directly as a regular white paint.

MILITARY INTEREST:

CIVIL AGENCY COORDINATING ACTIVITY:

Army - MR
Navy - SH
Air Force - 84

GSA-FSS
HUD-HEE
PO
VA

Preparing activity:

GSA-FSS

Orders for this publication are to be placed with General Services Administration acting as an agent for the Superintendent of Documents. See Section 2 of this specification to obtain extra copies and other documents referenced herein. Price 35 cents each.

TT-P-30E
AMENDMENT-1
March 21, 1984

FEDERAL SPECIFICATION

PAINT, ALKYD, ODORLESS, INTERIOR, FLAT
WHITE AND TINTS

This amendment, which forms a part of Federal Specification TT-P-30E, dated June 30, 1977, was approved by the Assistant Administrator, Federal Supply and Services, General Services Administration, for the use of all Federal agencies.

PAGE 1

Paragraph 2.1, under Federal Specifications, add:

TT-T-291 - Thinner, Paint, Mineral Spirits, Regular and Odorless
TT-T-390 - Tinting Medium, Concentrate, General-Purpose

Paragraph 2.2, under American Society for Testing and Materials (ASTM) Standards, add:

D 523 - Specular Gloss
D 1729 - Visual Evaluation of Color Differences of Opaque Materials
D 1849 - Package Stability of Paint
D 2698 - Pigment Content of Solvent-Type Paints by High-Speed Centrifuging
D 2805 - Hiding Power of Paints
D 3335 - Low Concentrations of Lead, Cadmium, and Cobalt by Atomic Absorption Spectroscopy

Add: South Coast Air Quality Management District

Rule 102 - Definition of Terms

(Application for copies should be made to South Coast Air Quality Management District, 9150 Flair Drive, El Monte, CA 91731.)

Paragraph 3.2.2 and Table I, delete in their entirety and substitute:

"3.2.2. Vehicle. The vehicle shall be a drying-oil alkyd in an odorless solvent that is nonphotochemically reactive as defined in Rule 102 of South Coast Air Quality Management District."

PAGE 3

Paragraph 3.3.4, delete in its entirety and substitute:

"3.3.4 Odor. When tested as specified in 4.3.4, the odor of the paint in the can and during application shall be similar to odorless mineral spirits. The paint shall have no residual odor 72 hours after application.

PAGE 5

Table IV. Color, delete "4250"; add "D 1729" under ASTM.

Storage stability, delete "3022"; add "D 1849" under ASTM.

Roller coating properties, change "4335" to "2112".

Washability properties, add "6141" under Fed. Test Method Std. No. 141.

Pigment, delete "4021"; add "D 2698" under ASTM.

Nonvolatile vehicle, delete "4053"; add "D 2698" under ASTM.

Gloss, delete "6103"; add "D 523" under ASTM and "4.3.15" under Paragraph Reference.

Lead content, add "D 3335" under ASTM.

FSC 8010

TT-P-30E
AMENDMENT-1

PAGE 6

Paragraph 4.3.2, lines 4 and 5, change "method 4250 of Fed. Test Method Std. No. 141" to "ASTM D 1729".

Paragraph 4.3.3.2, lines 1 and 2, change "method 3022 of Fed. Test Method Std. No. 141" to "ASTM D 1849".

Paragraph 4.3.4, delete in its entirety and substitute:

"4.3.4 Odor. Compare the odor of the paint with odorless mineral spirits conforming to TT-T-291, type III in accordance with ASTM D 1296. Allow the sample to air-dry 72 hours and evaluate for residual odor."

Paragraph 4.3.7, line 2, change "4335" to "2112".

Paragraph 4.3.8, delete in its entirety and substitute:

"4.3.8 Flexibility. Apply the paint with a film applicator to obtain a 25 +/- 2 um (0.001 +/- 0.0001 inch) thick dry film on a tin panel complying with method 2012 of Fed. Test Method Std. No. 141. Air dry 18 hours, bake 5 hours at 105 +/- 2 deg. C (121 +/- 4 deg. F), cool at 23 +/- 1 deg. C (73 +/- 2 deg. F) and 50 +/- 4 percent relative humidity for 1/2 hours and bend over a 12.7 mm (1/2 inch) mandrel in accordance with method 6221 of Fed. Test Method Std. No. 141.

Paragraph 4.3.9, change the body of the paragraph to read:

"4.3.9 Washability properties. Prepare and test two panels in accordance with method 6141 of Fed. Test Method Std. No. 141 with the exceptions: The paint shall be applied over dried films of enamel conforming to TT-E-545 and (1) through (6) below.

Paragraph 4.3.9 (5), change the exception to read:

"(5) Measure the 85 deg, gloss in accordance with ASTM D 523."

PAGE 7

Paragraph 4.3.12, line 15, change "method 6103 of Fed. Test Method Std. No. 141" to "ASTM D 523".

Paragraph 4.3.13, change the paragraph to read:

"4.3.13 Lead content. Determine lead content in accordance with ASTM D 3335 or as specified below. In case of dispute, the following procedure shall be used.

PAGE 8

Add new paragraph 4.3.15:

"4.3.15 Specular gloss. Draw down the paint on plane, opaque, white glass panels specified in 2.1.5 of method 2021 of Fed. Test Method Std. No. 141. Use a film applicator which will produce a wet film thickness of 76 +/- 2 um (0.003 +/- 0.0001 inch). Dry the panels 48 hours at 23 +/- 1 deg. C (73 +/- 2 deg. F) and 50 +/- 4 percent relative humidity in a dust-free environment. Determine 85 deg. gloss in accordance with ASTM D 523.