

TT-P-1728A  
February 4, 1974  
SUPERSEDING  
Int. Fed. Spec. TT-P-001728 (COM-NBS)  
July 7, 1971

## FEDERAL SPECIFICATION

### PAINT, LATEX-BASE, INTERIOR, FLAT, DEEP-TONE

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

#### 1. SCOPE

1.1 Scope. This specification covers a range of deep-tone ready-mixed later-base paints for interior walls and ceilings. (See 3.3.2).

#### 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:

H-B-420	- Brush, Paint, Flat, Metal-Bound.
SS-L-30	- Lath, Sheathing, and Wallboard, Gypsum.
TT-P-143	- Paint, Varnish, Lacquer, and Related Materials; Packaging, and Marking of.
TT-P-650	- Primer Coating, Latex-Base, Interior, White (for Gypsum Wallboard).
TT-S-179	- Sealer Surface: Pigmented Oil, Plaster and Wallboard.
LLL-B-1188	- Building Board, Hard Pressed Vegetable Fiber (Laminated).
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 my 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, Washington.)

(Federal Government activities my obtain copies of Federal Specifications,

Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.)

Military Standards:

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

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

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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 (AM) Standards:

D2088 - Determination of Low Concentration of Lead in Paint.

D3273 - Test for Resistance to Growth of Mold on the Surface of Interior Coatings.

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

(Technical society and technical association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

### 3. REQUIREMENTS

3.1 The paint as received shall consist of the pigment and vehicle specified, so combined as to produce a paint meeting all the requirements of this specification.

3.1.1 Pigment. Suitable lightfast and alkali resistant pigments shall be used.

3.1.2 Vehicle. The vehicle shall be of the latex type, i.e., a stable aqueous dispersion of synthetic resin particles prepared by emulsion polarization. Small additions (not in excess of 10 percent) of emulsified modifying resins needed to meet the performance requirements of this specification may be made.

3.2 Quantitative requirements. The quantitative requirements of the paint shall be as specified in tables I and II.

TABLE I. Quantitative requirements

Characteristics	Requirements	
	Minimum	Maximum
Consistency, Krebs-Stormer, shearing rate 200 r.p.m.		
Grams.....	190	325
Equivalent Krebs Units (K.U.).....	80	98
Nonvolatile, percent by wt. of paint.....	50	---
Dry hard, time, hours.....	---	1
85 deg. specular gloss (sheen).....	3	8
Fineness of grind.....	3	---
Lead content, percent by weight of total nonvolatile...	---	0.5

TABLE II. Opacity for deep tones  
Minimum contract ratio for paints applied at 630 ft<sup>2</sup>/gal

Color Fed. Std. No. 595	Contrast ratio	
	Dry	Wet
32356	0.95	0.93

30233	1.00	0.99
33695	0.98	0.96
34227	0.99	0.98
34300	0.98	0.98
35193	0.99	0.98
35189	0.99	0.98
36293	0.99	0.98

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### 3.3 Qualitative requirements.

3.3.1 Condition in container. The paint as received shall be ready-mixed and shall show no evidence of mold growth, livering, skinning, putrefaction, corrosion of the container, or bard settling of the pigment. Any settled pigment shall be readily dispersible in the liquid portion by hand stirring to form a smooth homogeneous paint, free from persistent foam.

3.3.2 Color. The color of the paint shall match the specified chip in Fed. Std. No. 595 when tested in 4.4.2. The following colors are contemplated under this specification:

Fed. Std. No. 595 Color No.	IBCC-NBS Designation *
32356	moderate reddish Orange
30233	light reddish Brown
33695	light Yellow
34227	moderate yellowish Green
34300	light Green
35193	moderate greenish Blue
35189	moderate Blue
36293	medium Gray

\*Inter-Society Color Council-National Bureau of Standards color names are provided for convenience in visualizing the range of colors available under this specification. Paints are required to match the specified Fed. Std. No. 595 color number.

3.3.3 Flexibility. When tested as described in 4.4.3 the paint shall show no evidence of cracking, chipping, or flaking.

3.3.1 Working properties. The paint shall be easily applied by brush, roller, or spray equipment as tested in 4.4.4. The paint shall show no streaks or foaming.

3.3.5 Appearance of dried paint. When applied by brushing or rolling as specified in 4.4.4 the paint shall dry to a smooth, uniform finish free from craters and other defects caused by bubble retention. There shall be no "shiners" or flashing, no streaking, and no conspicuous laps or objectionable brush marks. The difference in 85 deg. specular gloss between the bare, the latex-base primed, the oil-based primed, and the joint-cement surface of the board shall not be more than 2 units and the difference in reflectance shall not be more than 1 percent as tested in 4.4.4.

3.3.6 Odor. The odor shall not be putrid or otherwise offensive or irritating before, during and after application. There shall be no residual odor after 24 hours of drying.

3.3.7 Self-lifting properties. The paint shall produce no lifting, softening, or other film irregularities upon recoating a previously painted surface when tested as in 4.4.4.

3.3.8 Streaking. A film of thoroughly mixed paint, flowed on a glass panel and dried in a nearly vertical position shall show no evidence of streaking or separation or any of the paint components when tested as in 4.4.7.

3.3.9 Scrubbability. When painted panels are tested as specified the film shall not be worn through to the undercoat in fewer than 1500 brush cycles.

3.3.10 Washability. When painted panels are tested as specified in 4.4.8, the soil shall be substantially removed without any exposure of the undercoat. The reflectance of the cleaned area shall be not less than 92 percent of the value measured on the unsoiled area before the test; the 85 deg. gloss shall be not greater than 12.

3.3.11 Storage stability. The paint as received will withstand the freeze-thaw test and the heat storage test described in 4.4.9 with a

consistency change not greater than 5KU. After completion of these tests the paint applied to a wallboard panel shall dry to a smooth, uniform finish.

3.3.12. Water resistance. When the paint film is tested as specified in 4.4.10, the film shall show no wrinkling, re-emulsification, or other changes.

3.3.13 Alkali resistance. When the paint film is tested as specified in 4.4.11, the film shall show no change in hue and not more than very slight changes in lightness and gloss.

3.3.14 Fungus resistance. When specified, the paint shall show no fungus growth in accordance with ASTM D3273. (see 6.2). Mercurial type fungicide shall not be used. A certified statement to this effect is necessary.

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3.3.15 Resistance to reflectance variation. When tested as in 4.4.6, the general appearance of the panel, including the color, shall be substantially uniform. Any variation in reflectance of the film between the coated sealed and coated unsealed areas shall not exceed 0.5 percent. Example: A coating that shows reflectance readings of 32.3 percent and 32.8 percent on the two portions of the penetration chart is at the maximum limit of acceptability with respect to reflectance variation.

3.3.16 Anchorage. A film of the paint when tested as in 4.4.13 shall show no removal or other wise loosening of the paint film beyond one sixteenth inch on either side of the score line.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements specified herein. Except as otherwise specified the supplier may utilize his own facilities or any commercial laboratory acceptable to 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 the prescribed requirements.

4.2 Classification of inspection. Inspection shall be classified as follows:

- (a) Production inspection of the paint.
- (b) Inspection of preparation for delivery.

4.3 Production inspection.

4.3.1 Sampling and inspection. Sampling and inspection shall be in accordance with Fed. Test Method Std. No. 141, section 1000.

4.4 Test procedures. The paint shall be tested in accordance with the following applicable methods of Fed. Test Method Std. No. 141 as indicated in table III and as hereinafter specified.

TABLE III. Index

Characteristics	Requirements reference	Test Method	
		Fed. Test Method Std. No. 141	Paragraph reference
Condition in container	3.3.1	3011	4.4.1
Consistency	Table I	4281	
Nonvolatile	Table I	4041	
Dry hard time	Table I	4061[1]	
Opacity, dry	Tables I and II	4121[2]	
Opacity, wet	Tables I and II		4.4.12
85 deg. specular gloss (sheen)	Table I	6103	
Fineness of grind	Table I	4411	
Lead content	Table I		4.4.14
Color	3.3.2	4250	4.4.2
Flexibility	3.3.3	6221	4.4.3
Working properties	3.3.4		4.4.4
Appearance	3.3.5		4.4.5
Odor	3.3.6	4401	
Self-lifting properties	3.3.7		4.4.4
Streaking	3.3.8		4.4.7

Scrubability	3.3.9	6142	
Washability	3.3.10		4.4.8
Storage stability	3.3.11		4.4.9
Water resistance	3.3.12		4.4.10
Alkali resistance	3.3.13		4.4.11
Fungus resistance	3.3.14		
Resistance to reflectance variation	3.3.15		4.4.6
Anchorage	3.3.16		

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[1] Apply a film of the paint with a 0.0025-inch (approximately 0.005-inch gap clearance) Bird film applicator or any other doctor blade which produces a film of the same thickness.

[2] Procedure B, Method A.



4.4.1 Condition in container. Examine the paint as received in accordance with method 3011 of Fed. Test Method Std. No. 141 for compliance with 3.3.1.

4.4.2 Color. The film shall be applied to clean, smooth, plate-glass panel with a 0.003-inch (approximately 0.006-inch gap clearance) Bird film applicator, or any other doctor blade which produces a film of the same thickness as that produced by the Bird doctor blade, and shall be allowed to dry for 24 hours. Compare the color of the dried film in accordance with method 4250 of Fed. Test Method Std. No. 141.

4.4.3 Flexibility. Prepare the test panel in accordance with method 2012 of Fed. Test Method Std. No. 141. Supplement the test panel cleaning procedure with an additional cleaning abrasive soap (such as Bon Ami or equal) so that the entire surface of the panel is water wet. Apply the paint in accordance with method 2162 on the clean, dry panel with a 0.002-inch (approximately 0.004-inch gap clearance) Bird film applicator or similar blade which produces the same film thickness. Air dry for 18 hours, bake for 3 hours at 105 deg. +/- 2 deg. C. Cool for 1/2 hour, bend over 1/4-inch mandrel and examine in accordance with method 6221 of Fed. Test Method Std. No. 141 for compliance with 3.3.3.

4.4.4 Working properties. Prepare a 4-foot square panel of composition wallboard (LLL-B-1188) such as Upson board or gypsum wallboard (SS-L-30). Mark off the board in 1-foot by 4-foot sections, starting from the left as part 1; leave part 1 bare. On part 2 apply one coat of latex priming coat (TT0P0650) at a spreading rate of 450 square feet per gallon. On part 3, apply one coat of primer coating (TT-S-179) at a spreading rate of 450 square feet per gallon. On part 4, saw one groove paralleling the long dimension 1/16-inch deep and 3-inches wide and fill the groove with joint cement of low absorption or of the same type used to fill joints of plasterboard. Sand the rough spots after joint cement has dried. Allow the panel to dry for 24 hours, and then apply the sample paint at a spreading rate of 530 square feet per gallon, over the entire surface using a 5-inch nylon wall brush (H-B-420, Grade AA). Allow the panel to dry 3 hours; then apply a second coat over the upper half of the panel at a spreading rate of 530 square feet per gallon covering parts 1 through 4. Cover the remaining half using a 7-inch mohair roller with 1/8-inch pile depth. While applying the second coat observe any film irregularities such as softening or lifting. After a 24-hour drying period, obtain gloss and reflectance readings in accordance with method 6103 and 6121 of Fed. Test Method Std. No. 141, respectively, on the roller-coated and brushed surfaces for a total of eight different readings each. After examining for deficiencies as specified in paragraphs 3.3.4 and 3.3.5 (see paragraph 4.4.5) apply a spray coat over a portion of the panel to determine sprayability of the paint.

4.4.5 Appearance of dried film. The dried film of the paint as applied in 4.4.4 shall be examined for compliance with 3.3.5.

4.4.6 Resistance to reflectance variation. Apply the paint to a penetration chart[1] on a suction box, with a doctor blade giving a wet film thickness of 2.5 mils and a width of 3-1/2 inches. Allow the material to dry, in a horizontal position, not less than 24-hours, at 73.5 deg. +/- 2 deg. F. and a relative humidity of 50 percent plus or minus 4 percent. After the drying period, obtain 45 deg. directional reflectance measurements in accordance with method 6121 of Fed. Test Method Std. No. 141 on the sealed and unsealed portions of the penetration chart and report the difference.

[1] Charts (Form HK) obtained from The Leneta Company, P.O. Box 576, HO-HO-KUS, NJ, are satisfactory.

4.4.7 Streaking. Flow the ready-mixed paint on a 4 by 6-inch plate glass panel (2021 of Fed. Test Method Std. No. 141) and allow the paint to dry for 18 hours. Evidence of the flowed film showing separation of the paint components shall constitute failure of the test.

4.4.8 Washability. Prepare the panels with undercoat in accordance with method 6142 of Fed. Test Method Std. No. 141. Soil and test the panels according to method 6141, except:

- (a) Measure 85 deg. specular gloss according to method 6103 of Fed. Test Method Std. No. 141.
- (b) Recharge the sponge after every 25 cycles until a total of 100 cycles has been run.

4.4.9 Storage stability.

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4.4.9.1 Specimens and exposure. Fill two resin-lined friction-top cans with the sample paint as received, and close the cans tightly. Expose one can and contents three times to the following freeze-thaw cycle.

- (a) Low temperature of plus 15 deg. +/- 3 deg. F. for 16 hours.
- (b) High temperature of 77 deg. +/- 5 deg. F. for 8 hours.

Store the other samples in an oven at 120 deg. F. for 14 days.

#### 4.4.9.2 Procedure:

- (a) At the completion of the exposure test measure the consistency (method 4281) of both specimens and compare with the original consistency to determine compliance with the requirements of 3.3.11.
- (b) Brush the paint on a composition or sypsum wallboard panel and observe while brushing and after drying whether the paint is normal and usable in all respects. Compare with the unexposed paint with respect to freedom from coagulation, agglomeration, speckiness and change in sheen or color.

4.4.10 Water resistance. Prepare panels as specified in 4.4.8 and allow 120 hours for air drying after the application of the paint. Place five drops of distilled water on the paint and immediately cover the area with 50 mm watchglass. After 4 hours, remove the watchglass and note any change in the appearance of the film. Remove water and allow 2 hours for recovery. Gently rub the film surface to determine whether the paint complies as specified in 3.3.12.

4.4.11 Alkali resistance. Prepare panels as specified in 4.4.8 and allow 120 hours for air drying after the application of the paint. Place five drops of a 0.5 percent by weight aqueous sodium solution on the paint and immediately cover the surface with a 50 mm watchglass. After 4 hours, remove the watchglass, wash off the solution, allow 2 hours for recovery and examine for compliance as specified in 3.3.13.

4.4.12 Wet opacity. Apply a coat (0-0015 inch wet film thickness) of water-white mineral oil (U.S.P. Liquid Petrolatum Heavy) by doctor blade over each of the dried test film prepared for determining the dry opacity. Allow to stand 10 minutes and determine the contrast ratio as described in method 4121.

4.4.13 Anchorage. Prepare a panel as in 4.4.3. Score a line through to the metal across the width of the film using a sharp pointed knife. The film shall then be taped perpendicular to and across the score line with waterproof, pressure sensitive tape (3.4 inch wide) conforming to PPP-T-60. Press the tape with two passes of 4-1/2 pound rubber covered roller approximately 3-1/2-inch diameter by 1-3/4-inch wide. The surface of the roller shall have a Durometer hardness value of 70 to 80 range. Remove the tape in one abrupt motion and examine the film for compliance with 3.3.16.

4.4.14 Lead content. Determine lead content in paint in accordance with ASTM method D2088 for compliance with table I.

#### 4.4.14.1 Calculation.

$$\text{Lead (Percent by weight of total nonvolatile)} = \frac{A \times 0.86623 \times 100}{B}$$

Where: A = Grams of lead oxide ( $\text{PbO} \cdot \frac{1}{2} \text{O}_2$ ) in ash.

B = Grams of total nonvolatile of paint or dried film.

4.5 Inspection of preparation for delivery. The paint shall be examined for compliance with packaging, packing, and marking requirements of section 5 in accordance with TT-P-143. Any container in the sample having one or more defects, or under required fill, shall be rejected, and if the number of defective containers in any sample exceeds the acceptable number of appropriate sampling plan of MIL-STD-105, the lot represented by the sample shall be rejected.

#### 5. PREPARATION FOR DELIVERY.

5.1 Packaging, packing, and marking. The paint shall be packaged, packed, and marked in accordance with TT-P-143. The level of packaging shall be level A, B, or C, and the level of packing shall be level A, B, or C, as specified (see 6.2). The paint shall be furnished in 1-gallon metal cans, or 5-gallon steel pails as specified (see 6.2). All containers shall be resin-lined.

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5.1.1 Additional marking. Each container shall also contain the following additional identification marking: Paint, Latex-Base, Interior, Flat, Deep-Tone, and the color number and name (see 3.3.2).

## 6. NOTES

6.1 Intended use. Latex-base paint covered by this specification is intended for use on interior wall and ceiling surfaces such as wallboard and plaster. It may be applied to previously painted wood, plaster or dry wall surfaces, except those of the glossy type. Glossy finishes should be dulled either by sanding or by washing with a solvent-type cleaner.

6.2 Ordering data. Purchasers should exercise any desired options offered herein and procurement documents should specify the following:

- (a) Title, number, and date of this specification.
- (b) Color required (see 3.3.2).
- (c) Level of packaging and level of packing required (see 5.1).
- (d) Quantities to be packaged (see 5.1).
- (e) Whether special fungus resistance properties are required (see 3.3.14).

6.3 Unit of purchase. The unit of purchase shall be 1 U.S. gallon which is equal to 232 cubic inches. Paint temperature shall not be in excess of 20 deg. C. (68 deg. F.) at time of volume measurement.

6.4 Test organism. The organism used in the fungus-resistance test specified in table III may be obtained from the American Type Culture Collection, 2112 M St., N. W., Washington, DC, 20007, or for service use, from the Pioneering Research Division, Quartermaster Research and Development Center, Natick, Massachusetts.

6.5 Film caster. A film caster providing both 7- and 10-mil clearance is available from Gardner Laboratory, Inc., Bethesda, MD 20014.

### MILITARY CUSTODIANS:

Navy - Yd

### Preparing activity:

GSA-FSS

### Review activity:

Army - MR, CE

### CIVIL AGENCY COORDINATING ACTIVITY:

GSA-FSS  
COM-NBS

### User activities:

Army - MO  
Navy - SH

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 10 cents each.

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 AMENDMENT-1  
 June 23, 1977

# FEDERAL SPECIFICATION

PAINT, LATEX BASE, INTERIOR, FLAT, DEEP-TONE

This amendment, which forms a part of Federal Specification TT-P-1728A, dated February 4, 1974, was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

## PAGE 1

Under Federal Specification, change "TT-P-143" to "PPP-P-1892".

## PAGE 2

Under American Society for Testing and Materials (ASTM) Standards:

Delete:

D 2088 - Determination of Low Concentrations of Lead in Paint.

and add the following:

D 562 - Test for Consistency of Paints Using the Stormer Viscosimeter.

D 1210 - Test for Fineness of Dispersion of Pigment-Vehicle Systems.

D 1296 - Test for Odor of Volatile Solvents and Diluents.

D 2369 - Test for Volatile Content of Paints.

E 97 - Test for 45-Deg, 0-Deg Directional Reflectance of Opaque Specimens by Filter Photometry.

Table I, last line, under maximum. Change "0.5" to "0.06".

Paragraph 4.4 and table III. Delete and substitute:

4.4 Test procedures. The paint shall be tested as indicated in table III and as herein after specified.

TABLE III. Index

Characteristics	Requirement Reference	Test Method		Paragraph Reference
		Fed. Test Method Std. No. 141	ASTM Method	
Condition in container	3.3.1	3011	----	4.4.1
Consistency	Table I	----	D 562	-----
Nonvolatile	Table I	----	D 2369	-----
Dry hard time	Table I	4061[1]	----	-----
Opacity, dry	Tables I and Table II	1521[2]	----	-----
Opacity, wet	Tables I and II	----	----	4.4.12
85 deg. specular gloss (sheen)	Table I	6103	----	-----
Fineness of grind	Table I	----	D 1210	-----

Load content	Table I	----	----	4.4.14
Color	3.3.2	4250	----	4.4.2
Flexibility	3.3.3	6221	----	4.4.3
Working properties	3.3.4	----	----	4.4.4
Appearance	3.3.5	----	----	4.4.5
Odor	3.3.6	----	D 1296	-----
Self-lifting properties	3.3.7	----	----	4.4.4
Streaking	3.3.8	----	----	4.4.7
Scrubbablity	3.3.9	6142	----	-----
Washability	3.3.10	----	----	4.4.8
Storage stability	3.3.11	----	----	4.4.9

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TABLE III. Index (con.)

Characteristics	Requirement Reference	Test Method		
		Fed. Test Method Std. No. 141	ASTM Method	Paragraph Reference
Water resistance	3.3.12	----	----	4.4.10
Alkali resistance	3.3.13	----	----	4.4.11
Fungus resistance	3.3.24	----	D 3273	----
Resistance to reflectance variation	3.3.15	----	----	4.4.6
Anchorage	3.3.16	----	----	4.4.13

[1] Apply a film of the paint with a 0.0025-inch (approximately 0.005-inch gap clearance) Bird film applicator or any other doctor blade which produces a film of the same thickness.

[2] Procedure B, Method A.

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Paragraph 4.4.4. Delete 10th sentence and substitute: "After a 24 hour drying period, obtain gloss readings in accordance with Method 6103 of Fed. Test Method Std. No. 141, and reflectance as in accordance with ASTM Method E 97, on the roller-coated and brushed surfaces for a total of eight different readings each.

Paragraph 4.4.6, line 5. Delete "Method 6121 of Fed. Test Method Std. No. 141" and substitute "ASTM Method E97".

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Paragraph 4.4.14 and 4.4.14.1. Delete and substitute.

4.4.14 Lead content.

4.4.14.1 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 cut into discs of appropriate size to fit the sample holder of a fluorescence X-ray spectrometer.

4.4.14.2 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 dispersive fluorescence spectrometer shall be as follows:[1]

Element	Analytical Line	Angle	Crystal	Detection	Collimator	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 dispersive unit. Measure the count rates of lead, lead background, and the Molybdenum Compton scattered background from the X-ray tube.

#### 4.4.14.3 Calculation.

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

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

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where I equals gross Intensity. These results shall be compared to those obtained with a 0.06 percent lead standard made up from the ease type of paint sample and evaluated for compliance with table I.

Paragraph 4.5, line 2. Delete "TT-P-143" and substitute "PPP-P-1892".

Paragraph 5.1, line 2. Delete "TT-P-143" and substitute "PPP-P-1892".