

F.S.P.M.A. PAINT SPECIFICATION
DIVISION 9 - FINISHES
SECTION 09910 EXTERIOR & 09920 INTERIOR

FOR GENERAL EDUCATION FACILITIES USE

MP-25.2

ACRYLIC-BASE, PRIMER, INT/EXT, METAL SURFACES, GRAY

I. SCOPE, USE AND CLASSIFICATION

- A. SCOPE: This specification covers an acrylic rust inhibitive water based primer intended for use on unpainted and properly prepared steel, aluminum, and galvanized surfaces. This specification is recommended to be used in conjunction with acrylic latex enamel.
- B. USE: Containers shall have labels, meeting ANSI standards and giving adequate use instructions, firmly secured to each container. Labels shall meet all federal regulation requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard in CFR 1910.1200.
- C. CLASSIFICATION: The primer covered by this specification shall be of one type and one color which will be gray.

II. REQUIREMENTS

- A. MATERIALS. The paint shall be formulated from materials as specified herein. Materials not specified shall be selected by the supplier and shall be subject to all the provisions of this specification. The paint shall be free from material which is known to be toxic to personnel under normal conditions of use.
 - 1. PIGMENT. The pigments shall be of good commercial quality. Titanium dioxide shall be rutile, chalk-resisting type, conforming to ASTM D 476, Types III and IV. The remaining pigmentation shall be lead and chrome free.
 - 2. VEHICLE. The vehicle shall consist primarily of a pure acrylic resin that has been made by emulsion polymerization.
 - 3. RESTRICTED METALS. The paint shall comply with the latest requirements of the Federal, Florida State, City or Local Governments for maximum allowable restricted metals content.
 - 4. VOC COMPLIANCE. The paint shall comply with the latest requirements of the Federal, Florida State, City or Local Governments for the maximum allowable VOC content at the time of purchase.
- B. QUANTITATIVE REQUIREMENTS: The paint shall conform to quantitative requirements as specified in Table I.

TABLE I. QUANTITATIVE REQUIREMENTS

Characteristic	Tolerance Requirements	
	Minimum	Maximum
1. Non-volatile vehicle, % by wt. of primer.	17	-
2. Pigments, % by wt. of primer.	30	-
3. Viscosity, K.U.	80 (-3)	108(+3)
4. Fineness of grind, N.S.	3	-
5. Titanium dioxide (Types III & IV, 80% TiO ₂), % by wt. of primer.	10	-
6. Drying time:		
a. set-to-touch, minutes	-	45
b. dry-to-recoat, hours.	-	3
7. 60 ⁰ specular gloss after 24 hrs. dry*	-	10
8. Total solids, % by wt. of primer.	50	55
9. Nonvolatile matter, % by volume of paint**.	35	-

**Using 3 mil wet film thickness over plate glass backed with white paper.*

*** In order to confirm compliance with this requirement(s) the vendor shall submit either a formal report from an independent laboratory or a confidential, notarized, legally-binding manufacturer's report indicating the method used and the laboratory results obtained for the specific brand submitted for certification.*

C. QUALITATIVE REQUIREMENTS:

1. COLOR. The color of the paint specified in the contract or purchased order shall match that of the standard color chip. If a color other than standard is required, the color shall match that of the color standard submitted by the purchaser with the bid.
2. CONDITION IN CONTAINER. The paint, when tested as specified in Table II, shall be free from grit, seeds, skins, lumps and livering, and shall show no more pigment settling or caking than can be reincorporated into a smooth homogenous state. In a freshly opened container, there shall be no rusting of the container.
3. STORAGE STABILITY IN UNOPENED CONTAINER. All containers shall have sufficient preservatives to prevent spoilage for one year.
4. MATERIAL SAFETY DATA SHEET (MSDS). An MSDS clearly identifying this product, filled out completely according to the Florida Right-to-Know Law, Chapter 442, Florida Statutes, MUST BE submitted with each sample submitted for certification.
5. STORAGE STABILITY IN A PARTIALLY FULL CONTAINER. The paint shall show no skinning after 48 hours when tested as specified in III.D. After an additional 14 days, at 120⁰ F., the same sample shall show no skinning, livering, curdling, hard caking, or gummy sediment. It shall mix readily to a homogenous state and the viscosity change shall not be greater than ± 10 K.U.

6. ODOR. The odor shall not be putrid during or after application.
7. FLEXIBILITY. When tested as specified in III.B., there shall be no cracking, chipping, or flaking.
8. RESISTANCE TO LIFTING. When tested a specified in III. C., there shall be no evidence of the topcoat lifting room the primer surface.
9. HARDNESS. The paint, when tested as specified in Table II. (dry film thickness to be applied as stated in manufacturer's specification: test to be conducted after full-cure a defined by manufacturer), shall meet or exceed a 2B pencil hardness.

III. TEST PROCEDURES FOR LABORATORY ANALYSIS

The failure of any test in this section shall constitute a failure of the product to conform to the specification.

Unless otherwise noted, all test methods cited are the latest published revisions.

- A. PHYSICAL AND CHEMICAL PROPERTIES. The following tests shall be conducted in accordance with the methods as specified in Table II.

TABLE II. TEST AND METHODS

Test	Methods
1. Condition in container.	FTM Std. 141C, Meth. 3011.2
2. Nonvolatile Vehicle, % by wt. of primer.	FTM Std. 141C, Meth. 4053.1
3. Drying time set-to-touch, hard-to-recoat.	ASTM D 1640
4. Skinning.	FTM Std. 141C, Meth. 3021.1
5. Viscosity, Krebs-Stormer.	ASTM D 562
6. Fineness of grind.	ASTM D 1210
7. Analysis of titanium dioxide pigment.	ASTM D 1394, Aluminum Reduction Method
8. Pigment content.	ASTM D 2371
9. Hardness.	ASTM D 3363
10. 60 ⁰ specular gloss.	ASTM D 523
11. Nonvolatile matter (% by volume)	ASTM D 2697

- B. FLEXIBILITY. Determine flexibility in accordance with Method 6221 of FTM 141C. Apply a 2-inch wide film of enamel with a film applicator that will give a dry film thickness of 0.0025 and 0.0035 inch on a smooth finish steel panel prepared in accordance with FTM 141C, Mtd. 2011.2. The panel shall be prepared from new cold rolled carbon steel similar to Q Panel Co. panel no. D-36. Air dry for 96 hours. Bend over 1/8 inch mandrel. Examine the coating for compliance with II.C.7 over the area of the bend.

- C. RESISTANCE TO LIFTING. Prepare 2 test panels of the primer by making a draw down on steel panels using a 0.003-inch (0.006 inch gap) film applicator. Allow to air dry 2 hours. Brush a wet coat of certified MP-26 enamel over the test specimens. After the topcoat has air dried 24 hours, examine for compliance with II.C.8.
- D. STORAGE STABILITY IN PARTIALLY FULL CONTAINER. Determine skinning after 48 hours in accordance with Federal Test Method Std. 141C, Method 3021.1, except use a 3/4 filled 1 pint, multiple friction-top can. Reseal and store for 14 days at 120F. Check for compliance with II.C.5.

IV. METHODS OF SAMPLING, INSPECTION AND OTHER TESTS

- A. SAMPLING: At the option of the purchaser, representative samples shall be taken from deliveries made under this invitation and submitted for quality control testing. If the purchaser's sample fails, the manufacturer shall pay for the actual cost of testing. Failure of any sample so taken to comply with the specification requirements shall invalidate any purchase contract made under this invitation unless the manufacturer requests a repeat quality control test. This second sample shall be from the same batch. The manufacturer shall pay for the second quality control test should the sample fail, and this invalidates any purchase contract made under this invitation. If the second sample passes, the manufacturer is not responsible for paying the actual cost of the test, and results obtained from the second quality control test shall prevail.
- B. INSPECTION: Physical inspection of package, condition, quantity, and labeling shall be made at point of delivery by the purchaser. MSDS shall be submitted with each shipment in accordance with the Florida Right-to-Know Law, Chapter 442, Florida Statutes, and shall be identical to the MSDS supplied for initial certification.

NOTE: TESTING TO MEET THIS SPECIFICATION DOES NOT INCLUDE AN IN-USE PERFORMANCE TEST. ALL EDUCATIONAL AGENCIES SHOULD CONSIDER AN IN-USE PERFORMANCE TEST BEFORE PURCHASING THIS PRODUCT.

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