

F.S.P.M.A. PAINT SPECIFICATION

DIVISION 9 - FINISHES
SECTION 09910 EXTERIOR

FOR GENERAL EDUCATION FACILITIES USE

MP-52.1
HIGH PERFORMANCE BONDING PRIMER

I. SCOPE. USE AND CLASSIFICATION:

- A. SCOPE. A new generation low VOC, low temperature curing (35°F), interior/exterior waterborne, acrylic urethane primer that has outstanding adhesion to aluminum, ferrous and galvanized metals, wood, plaster, PVC, vinyl, plastic, glazed tile, glossy painted surfaces, glass and Formica. It eliminates flash rusting or rust bleed through. Primer may be topcoated with most acrylic latex, urethane, and epoxy finishes.
- B. USE: Structural, Steel, Aluminum, Galvanized, wood and other hard to coat surfaces. Containers shall have labels, meeting ANSI standard and giving adequate use instructions, firmly secure 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 surface conditioner covered by this specification shall be of one grade and class only.

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. VEHICLE. The vehicle shall consist of an acrylic urethane resin.
 2. RESTRICTED METALS. The coating shall comply with the latest requirements of the Federal, Florida State, City or Local Governments for maximum allowable restricted metals content.
 3. 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 the quantitative requirements as specified-in Table 1.

TABLE I. QUANTITATIVE REQUIREMENTS

CHARACTERISTICS	TOLERANCE REQUIREMENTS	
	MINIMUM	MAXIMUM
1. Nonvolatile vehicle, % by wt. of vehicle.	20	50
2. Specular Gloss 60 ⁰ (%)	-	20
3. Consistency, Krebs-Stormer, shearing, (KU).	80	110
4. Drying times: Set-to-touch, (min).	20	30
5. Dry hard, (hours).	3	24
6. Weight per gallon, (lb).	10.5	12.0
7. Adhesion (psi).	>100	-
8. Dry Heat resistance (⁰ F)*.	175	-
9. Pencil Hardness.	HB	H
10. Nonvolatile matter, % by volume of paint*.	33	-

**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. White
2. STORAGE STABILITY IN A PARTIALLY FULL CONTAINER. The paint shall show no skinning after 4hours when tested as specified in III.E. After an additional 14 days, at 120F, 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.
3. STORAGE STABILITY IN UNOPENED CONTAINER. All containers shall have sufficient preservatives to prevent spoilage for one year.
4. ODOR. The odor shall not be putrid during or after application.
5. ALKALI RESISTANCE. When tested as specified in III.B. a film of the conditioner shall not show any cracking, softening or loss of adhesion. Wrinkling shall be disregarded.
6. 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.
7. 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 on the container.
8. FLEXIBILITY. When tested as specified in IILC., there shall be no cracking, chipping, or flaking:

9. RESISTANCE TO LIFTING. The conditioner shall show no evidence of being lifted when a topcoat is applied when tested as specified in III.D.

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 revision.

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

TABLE II. TESTS AND METHODS

TEST	METHODS
1. Condition in container.	3011-1 Fed Test Method - 141A
2. Specular Gloss	ASTM D 523
3. Skinning.	3021 Fed Test Method - 141A
4. Nonvolatile vehicle content.	Fed Test Method - 4051
5. Consistency, Krebs-Stormer.	D2196
6. Drying time: Set-to-touch.	D1640
7. Drying time: Dry hard.	D5895-96
8. Weight per gallon.	D1475
9. Adhesion.	D4541
10. Dry Heat Resistance.	D2485-91
11. Pencil Hardness.	D3363-92A
12. Nonvolatile matter (% by volume)	ASTM D 2697

- B. ALKALI RESISTANCE. Immerse a solvent clean, dry test tube in a 400 ml. Beaker containing 4 inches of well-mixed conditioner for 5 seconds. Withdraw and suspend the tube in the same position as withdrawn and allow to dry at room temperature for 72 hours. Care must be exercised that the adhering film not rubbed off Immerse the coated portion of the test tube for 30 minutes in a 350-ml. beaker containing 125 ml. Of 2 percent sodium hydroxide solution maintained at 25C. Remove the test tube and allow to dry for 2 hours. Examine the adhering material for compliance with II.
- C. FLEXIBILITY. Draw down a film of the conditioner with a 0.002-inch doctor blade (approximately 0.004-inch cap clearance) on tin panels (prepared for FTMS 141C Method 2012.2). Air-dry for 48 hours 25C. and 50% relative humidity and bend rapidly over a 1/8 inch mandrel. Examine for compliance with II.C.9. as in FTMS 141C, method 6221.

- D. **RESISTANCE TO LIFTING.** Brush a coat of primer conditioner, approximately 1 mil wet film thickness, on a clean steel panel (prepared for FTMS 141C, Method 2011.2), allow to dry at room temperature for 24 hours. Brush a thin coat, approximately 1 mil wet film thickness of exterior enamel conforming to MP-28 over the dried conditioner of film. While brushing observe for lifting. . Allow the primer to dry at room temperature for 48 hours and then examine for compliance with II.C.10.
- E. **STORAGE STABILITY IN PARTIALLY FULL CONTAINER.** Determine skinning after 48 hours accordance with Federal Test Method Std. 141C,method 3021.1, except use a %filled 1 pint, multiple friction-top can. Then reseal and store for 14 days at 120F. Check for compliance with II.C.2.

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 invalidate. If the second sample passes, the manufacturer is not responsible for paying the actual cost of the test, and results obtained form 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 INUSE PERFORMANCE TEST. ALL EDUCATIONAL AGENCIES SHOULD CONSIDER AN IN-USE PERFORMANCE TEST BEFORE PURCHASING THIS PRODUCE.

ORIGINAL MP-52 - APPROVED on May 18, 2006

REVISION MP-52.1 - EFFECTIVE September 16, 2008

PRESIDENT FLORIDA SCHOOL PLANT MANAGEMENT ASSOCIATION

CHAIR FSPMA PAINT SPECIFICATIONS COMMITTEE