

F.S.P.M.A. PAINT SPECIFICATION FOR EDUCATIONAL FACILITIES USE

Spec. No. MP-7.6

PRIMER COATING, CONDITIONER FOR CHALKING EXTERIOR SURFACES, ALKYD BASE

I. SCOPE, USE AND CLASSIFICATION:

- A. **SCOPE.** This specification covers a penetrating surface conditioner to give good intercoat adhesion between a chalked porous substrate and top coat. This material is intended only for repainting over old weathered, free-chalking masonry surfaces. The conditioner shall apply easily on absorbent as well as nonabsorbent surfaces and shall not show brush marks, laps, sagging, or unevenness of gloss. This surface conditioner is not intended for a finish coat.
- B. **USE.** The entire surface should be vigorously wire-brushed by hand or by the use of a power tool. The surface should be pressure cleaned with a minimum of 1500 P.S.I. pressure with the minimum four and one half (4-1/2) gallons water per minute to remove all dust and chalk residue and all foreign matter apparent and non-apparent from surface before using penetrating conditioner. It is recommended that the user of this product apply a chemical wash to the surface to control any mildew or fungi spores before applying this product according to manufacturer's recommendations.

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 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. **PIGMENT.** The pigment shall consist of titanium dioxide pigment (ASTM D 476, Type II), calcium carbonate, silice or silicate extenders, and shading pigments as necessary to produce the desired color as specified.
 2. **VEHICLE.** The vehicle shall consist of long-oil alkyd resin together with the necessary amount of thinner, drier, and anti-skinning agent.
 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 the quantitative requirements as specified in Table I

TABLE I. QUANTITATIVE REQUIREMENTS

CHARACTERISTICS	TOLERANCE REQUIREMENTS	
	MINIMUM	MAXIMUM
Pigment, % by wt. of primer coating	39	(-3) 42
Nonvolatile vehicle, % by wt. of vehicle	32	-
Coarse particles and skins, % by wt. of primer coating		
Consistency, Krebs-Stormer, shearing rate at 200 rpm, K.U.	-	1
Drying times:		
Set to touch, hours	68 (-3)	78 (+4)
Dry hard, hours		
Fineness of grind, N.S.		
Weight per gallon, pounds	-	4
Titanium dioxide pigment, Type II, % by wt. of extracted pigment	-	24
	3	-
	9.9 (-2)	-
	20	-

C. QUALITATIVE REQUIREMENTS.

1. COLOR. The color of the paint specified in the contract or purchase order shall match that of the standard color chip. If a color other than white is required, the color shall match that of the standard color chip submitted by the purchaser with the bid.
2. STORAGE STABILITY IN A PARTIALLY FULL CONTAINER. The paint shall show no skinning after 48 hours when tested as specified in Table II. After an additional 14 days, at 120 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 great 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.

6. MATERIAL SAFETY DATA SHEET (MSDS). An MSDS clearly identifying this product, filled out completely according to the Florida Right-to-Know Law, Chapter 422, 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 of the container.
8. FUNGUS PROPERTIES. The paint shall contain no mercury, but shall contain fungicidal protection equivalent to 0.1% mercury as metal by total weight of paint.
9. FLEXIBILITY. When tested as in III.C., there shall be no cracking, chipping, or flaking.
10. RESISTANCE TO LIFTING. The conditioner shall show no evidence of being lifted when a top coat 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, the 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. TESTS AND METHODS

TEST	METHODS
Condition in container	FTM Std.141C, Meth. 3011.2
Skinning	FTM Std.141C, Meth. 3011.2
Pigment content	FTM Std.141C, Meth. 4021.1
Nonvolatile vehicle	FTM Std.141C, Meth. 4051.1
Coarse particles & skins	FTM Std.141C, Meth. 4092.1
Consistency, Krebs-Stormer	ASTM D 562
Drying time: set-to-touch	ASTM D 1640
Drying time: dry hard	ASTM D 1640
Fineness of grind	ASTM D 1210
Weight per gallon	ASTM D 1475
Titanium dioxide pigment content	ASTM D 1394

- 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 is not

rubbed off. Immerse the coated portion of the test tube for 30 minutes in a 250 ml beaker containing 125 ml of 2 percent sodium hydroxide solution maintained at 25 C. Remove the test tube and allow to dry for 2 hours. Examine the adhering material for compliance with II.C.5.

- C. FLEXIBILITY. Draw down a film of the conditioner with a 0.002 inch doctor blade (approximately 0.004-inch gap clearance) on tin panels (prepared by FTMS 141C, Method 2012.2). Air dry for 24 hours, bake for 5 hours at 105(+2) C. 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 the primer conditioner, approximately 1 mil wet film thickness, on a clean steel panel (prepared by 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-5 over the dried conditioner 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.

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 also 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.
- C. OTHER TESTS.
 - 1. WORKING PROPERTIES. Prepare a 4 root square gypsum wallboard panel conforming to SS-L-30 or LLL-B-1188. Apply one coat of pigmented surface sealer TT-S-179 a spreading rate of approximately 450 square feet per gallon and allow to dry for 24 hours. Mark off the board into approximately 3 equal parts. On one part, brush the sample paint at a spreading rate of 450 square feet per gallon using a 5 inch nylon brush conforming to H-B-420 grade AA; on the second part, roll a coat of the sample paint using a latex semi-gloss, short nap roller with 1/4 inch pile depth; and on the third part, spray a coat at a spreading rate of approximately 450 square feet per gallon using a suitable spray gun. Allow to dry 24 hours, then examine the dried film for compliance with I.A.

2. RECOATING PROPERTIES. Recoat the dried panel prepared in IV.C.1. and repeat the procedure as indicated. Evaluate the recoating properties as applied by brush, roller, and spray for compliance with I.A.

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.

ORIGINAL 7 - APPROVED October 17, 1979 (by FSPMA)

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