



Milamar M1 MVE

Product Data Sheet

Product Description

Milamar M1 MVE is a low viscosity, two part, 100% solids proprietary formulated moisture control system. It is virtually odorless and non-toxic. **Milamar M1 MVE** has excellent damp, as well as dry adhesion to concrete and masonry surfaces. With a very low viscosity of 250 centipoise, it readily penetrates porous substrates to provide an excellent mechanical bond. With a perm rating of .07 at the recommended application spread rate, **Milamar M1 MVE** is classified as a Class I Impermeable Vapor Retarder (Vapor Barrier). Where faster curing times are required, specify **Milamar M1 MVE FC**.

Product Application

Milamar M1 MVE is designed to treat new or existing concrete floors with high moisture and/or high pH to allow for installation of floor covering systems. Floor coverings and adhesives may be applied directly over cured M1 MVE. M1 MVE must be applied in two coats at 160-200 SF/gal each. M1 MVE should be allowed to dry tack free prior to application of the top coat to maximize effectiveness in sealing the concrete and to reduce any possible outgassing. **Milamar M1 MVE** can also be used as a penetrating concrete sealer to prevent dusting and moisture penetration.

Physical Characteristics

Density, lbs. /gal.	Pt. A	Pt. B	A&B Mixed
M1 MVE	9.52	8.01	9.22
M1 MVE FC	9.52	8.22	9.32

Viscosity@77°F, cps	Pt. A	Pt. B	A&B Mixed
M1 MVE	476	60	250
M1 MVE FC	476	60	250

Mixing Ratios (Part A: Part B)

	Vol.	Wt.
M1 MVE	3.4444:1	4.10:1
M1 MVE FC	4.63:1	5.37:1

Packaging and Coverage Rates

Milamar M1 MVE

4 Gallon Kit:	320 SF
20 Gallon Kit:	1600 SF
100 Gallon Drum Kit:	8,000 SF

Curing Times@:		40°F	50°F	70°F	90°F
Milamar M1 MVE	Pot Life:	---	35 min.	25 min.	15 min.
	Work Time:	---	85 min.	85 min.	50 min.
	Tack Free:	---	40 hrs.	10 hrs.	5 hrs.
	Set Hard:	---	72 hrs.	18 hrs.	9 hrs.
Milamar M1 MVE FC	Pot Life:	---	10 min.	9 min.	9 min.
	Work Time:	---	30 min.	30 min.	10 min.
	Tack Free:	---	18 hrs.	5 hrs.	2 hrs.
	Set Hard:	---	30 hrs.	9 hrs.	4 hrs.

Maximum Hardness achieved after 7 days @77°F.

Installation

1. Moisture testing is recommended via either the anhydrous calcium chloride moisture vapor emission rate test (ASTM F1869) and the in-situ relative humidity probe test (RH probe test, ASTM F2170).

2. Concrete must be structurally sound, solid, and meet industry standards as defined in ACI Committee 201 Report "Guide to Durable Concrete." Surfaces to be coated with M1 MVE must be free of moisture-sensitive patching and leveling materials, adhesives, coatings, curing compounds, concrete sealers, efflorescence, dust, grease, oils and any other materials or contaminants capable of breaking bond. Concrete surfaces must be mechanically prepared to an ICRI Concrete Surface Profile (CSP) of 3-4. The preferred method to achieve this is by shotblasting. Grinding is permitted only in areas inaccessible to shot blasting or for edging purposes. More aggressive surface profiling may be required to remove contaminants. Acid etching is not permitted. Upon completion of the shotblasting and grinding, the concrete slab must be vacuumed free of all dust, dirt and debris prior to installing M1 MVE.

Use of sweeping compounds is prohibited as most contain oil and will prevent bonding.

Concrete slabs may contain additional contaminants that inhibit bonding of a moisture control coating to the concrete. Thus, a more aggressive surface preparation, removal of concrete from the surface or removal of organic substances may be required.

3. Part A and B should be mixed in the prescribed ratio using a low speed jiffy-style mixer (maximum 750 rpm) for at least 60 seconds.

4. **Milamar M1 MVE** is a proprietary formulation of 100% solids epoxy and no solvents are necessary.
5. Apply the mixed material with a fine nap adhesive roller, squeegee or brush. Apply in two coats at approximately 160-200 SF per gallon each, depending on surface porosity.

Failure to follow the above instructions, unless expressly authorized by a Milamar Technical Service Representative, will void our material warranty.

Precautions

1. **Milamar M1 MVE** is very fast reacting; pour out of bucket immediately after mixing and spread with squeegee, especially at temps greater than 70°F.
2. Only **Milamar M1 MVE FC** can be applied below 50°F.
3. Recoat windows at 70°: **Milamar M1 MVE** – 18 hours; **Milamar M1 MVE FC** – 10 hours.
4. Never apply **Milamar M1 MVE** more than 15 mils (100 SF/gallon) per pass as it will not cure hard in greater thicknesses.

Product Specification

The specified area shall receive an application of **Milamar M1 MVE** as manufactured by **Milamar Coatings, L.L.C. of Oklahoma City, Oklahoma**. The system shall be installed by precisely following the manufacturers published recommendations pertaining to surface preparation, mixing, and application. The material shall be a low odor, solvent free, 100% solids epoxy with excellent adhesion to damp as well as dry concrete.

The data statements and recommendations set forth in this product information sheet are based on testing, research and other development work which has been carefully conducted by **Milamar Coatings, L.L.C.** and third party approved laboratories. We believe such data, statements and recommendations will serve as reliable guidelines. However, this product is subject to numerable uses under varying conditions over which we have no control and accordingly, we do NOT warrant that this product is suitable

for any particular use. Users are advised to test the product in advance to make certain it is suitable for their particular production conditions and particular use or uses.

LIMITED WARRANTY

Milamar Coatings products are manufactured to be free of defects in material and workmanship in meeting the properties specified on its individual Product Data Sheets. Users and installers of Milamar Coatings products are solely responsible for determining the suitability of the products for specific product applications. Milamar Coatings makes no Warranty or Guarantee, express or implied, including warranties of fitness, design compatibility or merchantability, for any particular use and shall have no responsibility or liability, including direct, indirect or consequential damages, due to injury, delay or third party claims for installation or repair. Likewise, Milamar Coatings assumes no liability of any nature for products that are adjusted in the field or that do not utilize all specified Milamar Coatings components. Should any Milamar Coatings product be proved to be defective within one year from the date of shipment, Milamar Coatings will, at its sole discretion, replace the material; issue a credit to the customer's account; or provide a cash refund for the initial, paid purchase price of the material. Potential claims regarding product quality must be received in writing by Milamar Coatings within 30 days of the discovery of such potential defect. This Warranty is exclusive of all other warranties, expressed or implied, and may only be adjusted in writing, signed by an officer of Milamar Coatings, L.L.C.

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