

## Product Data Sheet

### PRODUCT DESCRIPTION

**Milamar PM4000EF** Floor Coating System is comprised of a waterborne epoxy primer/base coat with exceptional adhesion to concrete and a unique low odor, low VOC, chemical resistant urethane finish. Both the epoxy and urethane finish coats are fully pigmented and designed to be used where chemical and abrasion resistance are required. The chemical resistant urethane finish coats are impervious to ultra violet attack and most common chemicals including Skydrol jet fuel and brake fluid. The 4000EF system is breathable withstanding up to 10 pounds of moisture vapor emission.

### TYPICAL USE

Versatile **Milamar 4000EF** Floor Coating is commonly used wherever a durable, easy to clean, chemical and abrasion resistant floor finish is required. Due to it's unique formulation, it is particularly well suited for floors on grade or below grade where moisture vapor emission is less than 10 lbs./1000 square feet per 24 hours.(ASTM F1869 method) Coating should not exceed 20 wet mils in these areas.

Choose **Milamar 4000EF** Floor Coating to reduce maintenance cost and brighten areas in T-hangars, warehouses, multi-purpose rooms, workshops, basements, retail shops and doggy day care.

### FEATURES

- Low VOC, under 90 grams per liter
- Minimal odor during application
- High gloss light reflective finish
- Easy to clean and maintain
- Color stable to UV exposure
- Excellent wear characteristics
- Breathable
- Available with slip resistant finish
- Good chemical resistance to automotive and aviation fluids

### LIMITATIONS

Do not install on wet (standing water) floors, in areas receiving direct sun light or where floor will be affected by drafts during curing process. Avoid use where ambient operating temperatures exceed 180°F, or application temperatures are below 65° F or above 90° F and above 80% relative humidity. Avoid on or below grade applications where water vapor transmission is greater

than 10 lbs./1000 sq. ft. per 24 hrs. Primer/base coat must be tack free and hard before applying topcoats.

### INSTALLATION

The performance of any floor coating is highly reliant upon proper preparation of the substrate. For assured adhesion, substrate must be free of all surface contamination such as built up grease and dirt, oil, laitance or curing compounds. Oily or greasy concrete should be first degreased, then diamond grind or acid etched and neutralized to create a surface texture similar to 100-grit sandpaper. Contact **Tele-Tech** for advice on coating previously coated substrates.

The components of the **Milamar 4000EF** Floor Coating **System** are normally roller applied with a 3/8" nap, non-shedding roller at a rate of 200 square feet per gallon per coat for **PM400** primer/base coat and 300 square feet per gallon per coat for **PM550** urethane topcoats. Two coats of **PM550** are recommended. Allow an additional coat of **PM400**, for porous or rough concrete.

Under standard conditions (75° F, 55% RH), **PM400** primer has a pot life of 1 hour with a recoat time of 7 hours. **PM550** topcoat has a pot life of 1 hour with recoat of 10 hours. Preferred installation temperature is 70°F to 80°F. (Contact **Tele-Tech** at **1-800-459-7659** for assistance in determining specific thickness, preparation and application methods)

### CAUTION

**Milamar 4000EF** Floor Coating System is intended for use by professional applicators. Although safe if properly handled, all personnel who are exposed to any chemical must read and completely understand precautions and warnings on label and MSDS prior to use.

### STORAGE

Store in a dry area at temperatures between 50°F and 90° F. Protect product from freezing. Minimum shelf life is one year from date of manufacture when properly stored.

### CHEMICAL RESISTANCE

Unlike conventional waterborne systems **Milamar 4000EF** is far more resistant to most common industrial chemicals and solvents as well as impact and abrasion than conventional waterborne systems. An abbreviated list of chemical resistance and physical properties follows. For

more comprehensive chemical resistance analysis, contact  
**Tele-Tech at 1-800-459-7659.**

REAGENT	30 MIN.	24 HRS.
Acetone	N	N
Acetic Acid (20%)	N	N
Ammonium Hydroxide (28%)	N	N
Battery Acid	N	N
Betadine	N	N
Brake & Hydraulic Fluid	N	N
Clorox	N	N
Ethylene Glycol	N	N
Gasoline	N	N
Iodine	D	D
Isopropyl Alcohol (98%)	N	N
Mineral Spirits	N	N
Nitric Acid (10%)	N	N
Phosphoric (50%)	D	D
Skydrol #500	N	N
Sulfuric Acid (45%)	N	N
Sodium Hydroxide (30%)	N	N
Sodium hypochlorite (10%)	N	N
Toluene	N	N

Chemical Resistance applies to PM550 top coat  
 N = NO ATTACK D = DISCOLORED F = FAILED

Physical Property	Primer	Topcoat
Percent Solids	56%	52%
Recommended Wet Film Thickness	8 mils	5 mils
Pot Life	1 hour	1 hour
Recoat Time, 75° F, 50% RH	7 hours	10 hours
Components	2, A&B	2, A&B
Bond Strength ASTM D-4541	>350 psi	>300 psi
Hardness Shore D ASTM D-Indentation MIL-D-3134F	76	73
Elongation ASTM D-638	No	No
Mixed VOC, grams per liter	4.3%	35%
	84	6

**Actual test results may vary due to the use of various aggregates, application methods and floor finish. The foregoing test results are based upon laboratory prepared samples and results may vary if not prepared by a professional technician.**

**COMPLIANCES**

**Milamar 4000EF** is compliant with national and most states volatile organic compound regulations but be sure to consult your states specific requirements before use.

**PACKAGING**

The components of **Milamar 4000EF** are normally package in 4 gallon kits for **PM400** primer/base coat and 1.84 gallon kits for **PM550** pigmented topcoat.

**AVAILABILITY**

**Milamar** products are available only through selected and approved applicators and distributors. This material is intended for commercial and industrial installations and should be installed by skilled, seamless flooring technicians. It is neither designed for, nor available for consumer use.

**COLOR SELECTION**

Primer Base coat PM400 is available in Gray and Mocha, PM550 Topcoat is available in Gray and Off white.

**CAUTION:**

COMPONENTS OF OR PRODUCTS USED WITH AND DURING THE INSTALLATION OF MILAMAR PRODUCTS MAY INCLUDE HAZARDOUS MATERIALS. All personnel exposed to or handling materials before and during installation must read and fully understand label precautions and Material Safety Data Sheets.

**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, either 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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