

Product Data Sheet For:

PLEXICRETE MF

Description

PlexiCrete MF is a three component, 100% solids polyurethane mortar monolithic flooring system designed for a variety of applications over concrete and various other substrates. It is also designed to reduce moisture vapor emissions and withstand moisture vapor transmission up to 20 lbs (per ASTM F 1869) and relative humidity up to 90% (per ASTM F 2170). This flowable monolithic flooring system will tolerate a wide range of organic and inorganic acids, alkalis and salts. PlexiCrete MF can be applied on new concrete substrates or rehabilitated substrates that have been exposed to contamination. It is applied at 1/8th to 3/16th inch and yields a self-leveling matte finish.

Advantages

- **High Performance Moisture Control System** - to reduce moisture vapor emissions apply as a primer/first coat prior to the application of non-breathing polymer flooring systems.
- **Chemical Resistance** – polyurethane technology provides superb protection against caustics, organic and inorganic acids, solvents (especially methylene chloride) and most chemicals used today in industry.
- **Thermal Shock Resistance** – PlexiCrete MF and concrete have a similar coefficient of thermal expansion with a range of service temperatures from -50°F to 265°F. PlexiCrete MF withstands continuous hot water wash downs.
- **Impact and Abrasion Resistance** – while epoxy and vinyl esters can crack and spall, PlexiCrete MF will absorb an impact and distribute the force throughout the system.
- **Downtime** – no primers or sealers are required due to the **resin-rich** properties. Fast curing in less than 6 hours.
- **Non-Slip** – the surface can be customized to any facilities requirements...from decorative self-leveling to aluminum-oxide solid broadcast with standard pigmented epoxy or chemical resistant formula.
- **Odorless Materials** – no tainting of food products due to freedom from objectionable odors during application.
- **Thermal Comfort** – PlexiCrete MF provides superior insulation over concrete or other plastic flooring systems.
- **Hygiene** – PlexiCrete MF eliminates tile joints, minimizes cracking as occurs in traditional monolithic flooring, and reduces potential bacteria growth.
- **Hydrostatic Pressure** – PlexiCrete MF will withstand up to 14 lb. of vapor transmission in the slab without delamination. It also allows the concrete to breathe and is a solution for many moisture problems.

Areas of Application

- Food & Beverage (*FDA/USDA Accepted*)
- Bakery
- Food Processing
- Dairy
- Meat Processing
- Soda & Juice Facilities
- Brewery
- Prepared Foods
- Commercial Kitchens
- Chemical Processing
- Animal Rooms
- Secondary Containment
- Pharmaceutical
- Pulp & Paper

Chemical Resistance

PlexiCrete flooring systems resist spills and in many cases immersion of:

<u>Acid</u>	<u>Alkali</u>
Hydrochloric	KOH
Phosphoric	Ammonium Chloride
Sulfuric	Sodium Hydroxide

Also resists hot fatty oils, diesel fuel, and organic solvents (MEK, Acetone, Toluene)

Full chemical resistance chart available upon request

Colors

Unlike competitor's products, PlexiCrete MF is available in a wide variety of colors

Solid Colors:

- Saber Grey
- Granada Grey
- Charcoal
- Tile Red

Surface Preparation

PlexiCrete and all of our high performance resurfacing systems always require shot blasting and mechanical

preparation. No other preparation method is acceptable for the long-term success of any floor.

Application

1. Self priming
2. Apply with a V Notched trowel at the required thickness or a camp rake.

The fresh material is then “spiked” rolled

3. to eliminate air bubbles in the system.
4. Option: add PlexiCrete MF pigment dispersion for color fast applications to prevent ambering.
5. Apply a clear finish as required.

Cleaning and Maintenance

Do not expose PlexiCrete MF system to any chemicals until the full curing time of 7 days has passed. Regular cleaning and maintenance will prolong the life of all polymer-flooring systems, enhance appearance and reduce any tendency to retain dirt.

Safety

Safe storage, handling, and use dictate that adequate health and safety precautions are observed with this product. User is specifically directed to consult the current Material Safety Data Sheet for this product as well as precautions contained on product labeling.

Storage and Shelf Life

Approximately six (6) months from date of manufacture when stored in its unopened original containers in a dry place at temperatures between +10°C and +30°C.

Leader in BBP (Benzyl Butyl Phthalate) free seamless urethane mortar flooring.

Typical Physical Properties

Compressive Strength	ASTM C-579	9,200 psi
Tensile Strength	ASTM C-307	5,800 psi
Coefficient of Thermal Expansion	ASTM C-531	1.5 x 10(-5) deg F
Coefficient of Friction	ASTM D-2047	.73 dry .65 wet
Density	ASTM C-905	130 lbs/ft3
Resistance to Fungi Growth	ASTM G-21	passes, rating of one
Impact Resistance	ASTM D-2794	no visible damage or deterioration at min 160 inch-pounds
Comprehensive Modulus	ASTM C-469	1.7 x 10(5) psi
Flexural Strength	ASTM C-580	3,505 psi
Modulus of Elasticity	ASTM C-469	1.7 x 10(5) psi
Thermal Conductivity	ASTM C-177	6.8 BTU-in/hr-ft2-deg F
Water Absorption	ASTM C-413	<0.1%
Abrasion Resistance	ASTM D-4060 @ 1000 cycles	.26 grams loss
Resistance to Elevated Temperatures	MIL-D-3134	no flowing or softening
Adhesion	ASTM D-4541	500 psi 100% concrete failure, exceeds concrete
Flammability	ASTM D 635	Self-extinguishing
Hardness	ASTM D Shore D-2240	80
Solids by Volume		100%

Notice: The technical data contained herein are true and accurate to the best of our knowledge. All products are offered and sold subject to Plexi-Chemie Standard Conditions of Sale. Published technical data and instructions are subject to change without prior notice.

Before using any Plexi-Chemie product, be sure the Material Safety Data Sheet is read and understood.

KEEP OUT OF REACH OF CHILDREN.