



## MasterGard Product Data

### Moisture Suppression System

#### Description

**MasterGard** Moisture Suppression System is a two-component system formulated to seal concrete surfaces and provide an excellent bond with Morricite Epoxy Terrazzo Systems. **MasterGard** significantly reduces water vapor transmission through concrete, prior to applying Morricite Epoxy Terrazzo or other non-breathing or moisture sensitive surfaces.

#### Typical Uses

- As a negative side moisture suppression system to reduce moisture vapor transmission through concrete prior to installing moisture sensitive finishes.
- As a primer under Morricite Epoxy Terrazzo.

#### Advantages

- **MasterGard** significantly reduces moisture vapor transmission through concrete.
- **MasterGard** provides excellent resistance to highly alkaline conditions often associated with moisture related failure.
- **MasterGard** provides excellent penetration to properly prepared substrates.
- **MasterGard** is cost effective due to ease of installation.
- **MasterGard** can be rapidly surfaced with Morricite Epoxy Terrazzo or MasterFlex Flexible Membrane.

#### Limitations

- Do not exceed recommended recoat time windows for applying Morricite Epoxy Terrazzo.
- Product should never be installed over poorly prepared substrates – see Master Terrazzo Technologies' Concrete Substrate Preparation Guidelines for further details.
- Morricite Primer should never be applied over wet substrates.
- Product is not designed to be used as an aesthetic coating.
- Store material in a cool, dry area 50° F to 90° F (10° C to 32° C) away from direct sunlight, flame or other hazards.
- Effective vapor barrier required beneath the substrate in contact with the substrate's underside and detailed at penetrations and perimeter.

#### Color

- Translucent Purple.

#### Application

- Stir resin and hardener separately prior to mixing.
- Mix two parts resin to one part hardener together and stir thoroughly for 45 to 60 seconds. Do not over mix. Apply by roller, trowel, or squeegee at a rate of 120-150 sq. ft. per gallon, depending on substrate porosity.
- Material will aggressively soak into the concrete. Apply additional material to any areas where all of the material has soaked into the slab until all areas show a uniform gloss. Coverage rates are critical to achieve performance.



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- For areas which cannot be surfaced with Morricite or MasterFlex within 72 hours, or as recommended by MTT for your specific conditions such as ASTM F2170 readings over 90%, apply second coat at approximately 200-250 sq. ft. per gallon. Lightly broadcast 80-mesh sand into the wet **MasterGard** to help achieve a good mechanical bond.
- Prior to installing Morricite or MasterFlex make sure that cured **MasterGard** is clean. Use light solvent wipe with MEK or Xylene to remove dirt or dust as needed.
- Clean up tools, etc. with mineral spirits or isopropyl alcohol.

### Surface Preparation

- Surface and air temperatures must be at least 55° F (12° C) during installation and initial cure.
- Surface should be checked for soundness any "hollow" areas removed. Prepare concrete substrate to "open" surface pores, including edges, by means of vacuum shot blasting or with a terrazzo grinder, dry with coarse diamond stones with a vacuum unit. Surface preparation results should achieve a CSP3-CSP5 profile according to International Concrete Repair Institute Guideline No. 03732. Concrete which has been previously treated with penetrating silicate sealers or curing agents may interfere with the effective penetration and bond of **MasterGard** and could require additional surface preparation.
- Test concrete substrates according to ASTM F2170 (Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes). Do not install terrazzo or terrazzo accessories until test results are 90% or less RH. If 90% RH is not met, consult MTT for approval to use a 2 coat **MasterGard** system.
- Dew point at time of installation must be at least 5° F less than the slab and air temperature.
- Pre-fill all cracks and non-moving joints with **MasterGard**. If all the material disappears into crack at first filling, fumed silica may be added to create gel. This gel should be forced into the void with a sharp tool to completely seal the void prior to detailing with MasterFlex.

### Safety

For industrial and professional use ONLY.

For detailed safety guidelines, please refer to the product Material Safety Data Sheet (MSDS)



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### Typical Physical Properties

Tensile Strength ASTM D 2370 (7 days)	9,900 psi	Hardness Shore D ASTM D 2240 (72 hours)	Hardness 80
Tensile Elongation ASTM D 2370 (7 days)	10%	Permeability ASTM E96	1 coat 0.30 ± 0.05 perms 2 coat 0.15 ± 0.05 perms
Modulus of Elasticity ASTM D 2370 (7 days)	1,600 psi	Alkalinity Resistance ASTM D 1308 (10% sodium hydroxide at 25° C)	14 day immersion – no deleterious effect
Adhesion ASTM D 4541 (7 days)	500 psi (concrete failure)	Cure before installing the Morricite at 65° F - 75° F	Minimum – 6-8 hours Maximum – 72 hours
Flash Point	>200° F	VOC	VOC Compliant
Mix Ratio	2:1 by volume	Pot Life	30 minutes at 75° F
Set to touch	2 hours, 75°F, 50% RH	Time between coats	4 hours minimum

### Warranty Information

Values stated herein are typical values based on periodic testing and product experience. MTT DISCLAIMS ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Where customer demonstrates non-conformance of product to typical values stated herein, MTT will supply replacement product or, at its option, credit Customer's account for the purchase price of non-conforming product. Recommendations herein as to the surface preparation, application, maintenance, and other matters involved in storage, handling, or use of product are based on best information reasonably available to MTT. Because MTT has no control over such matters, or over substrate or other conditions that may affect ultimate performance, Customer has the obligation to determine suitability of product for the intended purpose, and MTT SHALL HAVE NO RESPONSIBILITY FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES BUT ONLY FOR THE REPLACEMENT OR CREDITING REMEDY ABOVE. All claims for replacement or crediting must be made within one year from date of shipment. The sale and purchase of product from MTT are subject in each case to MTT's Terms and Conditions of Purchase.