

## TECHNICAL DATA SHEET

## FLEXIBLE BROADCAST PRIMER COAT

### PRODUCT DESCRIPTION:

**MF139** is a two component 100% solids epoxy designed for sealing traffic surfaces exposed to vehicular or foot traffic. The toughness and elongation eliminate the need to repair hairline cracks. This product is formulated for use in a broadcast system as the basecoat prior to installing epoxy mortars or other suitable topcoats.

### RECOMMENDED FOR:

**MF139** Recommended for priming with broadcasting as a crack bridging sealer before application of epoxy mortar or topcoats.

### SOLIDS BY WEIGHT:

100%

### SOLIDS BY VOLUME:

100%

### VOLATILE ORGANIC COMPOUND:

Zero g / L

### STANDARD COLOUR:

Clear

### RECOMMENDED FILM THICKNESS:

10-50 mils

### COVERAGE PER GALLON:

32-160 square feet per gallon @ 10-50 mils

### PACKAGING:

2 gallon kits

### MIX RATIO:

9.2 lbs (1 gallon) part A to 8.2 lbs (1.0 gallon) part B (approximate volume)

### SHELF LIFE:

1 year in unopened containers

### ABRASION RESISTANCE:

Taber abraser CS-10 callibrase wheel with 1000-gram total load and 500 cycles= 6 mg loss.

### FLEXURAL STRENGTH:

2,600 psi @ ASTM D790

### COMPRESSIVE STRENGTH:

4,100 psi @ ASTM D695

### ADHESION:

450 psi @ elcometer (concrete failure, no delamination)

### VISCOSITY:

Mixed= 1,000-1,700 cps (typical)

### TENSILE STRENGTH:

2,450 psi @ ASTM D638

### ULTIMATE ELONGATION :

60%

### GARDNER VARIABLE IMPACTOR:

160" lbs direct- passed

### HARDNESS:

Shore D= 58

### TDG CLASSIFICATIONS:

Part A "not regulated"

Part B "LIMITED QUANTITY"

### APPLICATION TEMPERATURE:

15°C – 32°C (60°F – 90°F) with relative humidity below 85%

### DRYING TIMES: (21°C / 70°F) @ 50% RH

Pot life – 2 gallons..... 15-25 minutes

Tack free (dry to touch) ..... 5-8 hours

Recoat or topcoat..... 8-12 hours

Light foot traffic... ..... 12-24 hours

Full cure (heavy traffic) ..... 2-7 days

### CHEMICAL RESISTANCE:

#### REAGENT

Xylene

Methanol

Skydrol

10% sodium hydroxide

50% sodium hydroxide

10% sulfuric acid

10% HCl (aq)

5% acetic acid

#### RATING

A

A

A

D

D

C

C

A

**Rating key:** A - not recommended, B - 2-hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

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### PRIMER:

Not required

### TOPCOAT:

After broadcasting aggregate into the **MF139**, many suitable toppings can be used. This would include products like epoxy mortars, two component urethanes or Novolac coatings. Check with your sales representative for application details.

### LIMITATIONS:

- Clarity of colour or gloss may be affected by environmental conditions such as high humidity, low temperatures, or chemical exposure.
- Clarity of colour may vary from batch to batch. Therefore, use only product from the same batch for an entire job when not intended solely as a primer.
- It is recommended that a broadcast application be performed with a subsequent topcoat system. This product is not intended as a decorative coating, but merely as a primer for bridging cracks in a broadcast system before top coating.
- This product is not suitable in all chemical environments. When chemical exposure is imminent, a test should be performed to test suitability.
- Substrate temperature must be 3°C / 5°F above dew point.
- All new concrete must be cured for at least 30 days prior to application.
- Applications with relative humidity above 85% or early water contamination may cause white discolorations to develop.

## MIXING AND APPLICATION INSTRUCTIONS

- 1) **PRODUCT STORAGE:** Store product at normal room temperature. Continuous storage should remain between 15°C – 32°C (60°F – 90°F). Low temperatures or temperature fluctuations may cause product crystallization.
- 2) **SURFACE PREPARATION:** The most suitable surface preparation would be a fine brush blast (shot blast) to remove all laitance and provide a suitable profile. All dirt, foreign contaminants, oil and laitance must be removed to assure a trouble free bond to the substrate. A test should be made to determine that the concrete is dry; this can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to begin coating.
- 3) **PRIMING:** Primers may be beneficial in some applications, dependent on performance characteristics and substrate condition, but none are required for product application.
- 4) **PRODUCT MIXING:** This product comes pre-packaged by weight. Kits should be mixed in their entirety. Pre-mix each component separately for 2-3 minutes each. Then combine the two components, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. This product is an emulsion product and should be mixed well before using. If partial kits are to be used, refer to the front of this technical data sheet for proper weight mix ratios.
- 5) **PRODUCT APPLICATION:** The mixed material can be applied by brush or roller. However, the material can also be applied by a suitable notched squeegee and then back rolled as long as the appropriate thickness recommendations are maintained. Because this material has a short pot life, it is beneficial in some applications to remove the material from the mixing pail by pouring the material onto the substrate and spreading it along the floor. Spreading out the material will allow the applicator more time to work with the material before it begins to cure. Aggregate should be broadcast into the applied material before applying suitable topcoats. Maintain temperatures and relative humidity within the recommended ranges during the application and curing process. If concrete conditions or over aggressive mixing causes air entrapment, then an air release roller tool should be used prior to the coating tacking off to remove the air entrapped in the coating. When using as a broadcast binder, always evaluate performance parameters with a test area which is dependent on aggregate size and thickness, prior to application. Contact your representative for details as necessary.
- 6) **RECOAT OR TOPCOATING:** We recommend a suitable topcoat be applied only after broadcasting suitable aggregate into the basecoat. If you recoat or topcoat this product, you must first be sure that the coating has tacked off before recoating. All previous coats that were not applied as a broadcast, should be deglossed to insure a trouble-free bond prior to application of recoats or topcoats. It is advisable to test topcoats for suitability prior to application when not in a broadcast system. Colder temperatures will require more cure time for the product before recoating or topcoating can commence. Before recoating or topcoating, check for epoxy blushes (a whitish, greasy film, or deglossing.) If a blush is present, it can be removed by any standard detergent, cleaner prior to topcoating or recoating. Many epoxy coatings and urethanes as well as multiple coats of this product are compatible for use as a topcoat.
- 7) **CLEANUP:** Use xylene
- 8) **FLOOR CLEANING:** Caution! Some cleaners may affect the colour of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product.
- 9) **RESTRICTIONS:** Restrict the use of the floor to light traffic and mild chemicals until the coating is fully cured. It is best to let the floor remain dry for the full cure cycle. Dependent on actual complete system application, surface may be slippery, especially when wet or contaminated; keep surface clean and dry.
- 10) **CAUTION:** Exposure during the curing stage of the coating to the by-products of **propane** combustion may cause discoloration to occur. During application and curing, propane fueled fork-lifts and other vehicles or propane fueled heaters should not be used in the area until the coating is fully cured, at least 72 hours.

**Before using any product, be sure the Safety Data Sheet is read and understood.**

**Please contact your MF Paints Inc. representative at 1-800-363-8034 for further information.**

## **WARRANTY**

This product will give full satisfaction if applied according to the manufacturer's instructions. Manufacturer's liability is limited to the replacement of the product and does not include manpower if found to be defective upon inspection.

***“Contact your municipality to dispose of the container and any surplus in a safe and ecological manner.”***