

## TECHNICAL DATA

## POLYASPARTIC SEALER

### PRODUCT DESCRIPTION:

MF449 is a two component 95% solids aliphatic polyaspartic sealer. This material can be used as the base coat and the topcoat over paint chip decorative broadcasts or colored sand broadcasts to provide an infinite array of color schemes or patterns. MF449 has excellent chemical resistance, hardness, abrasion resistance, UV stability and has an excellent clear gardner color. However, the outstanding feature of this product is its quick tack free time for foot traffic.

### RECOMMENDED FOR:

Recommended for areas where a medium build broadcasted floor is desired and installation downtime is very limited. This material can also be applied over a broadcasted or troweled system as a thin to medium build sealer.

### SOLIDS BY WEIGHT:

95% (+/- 1%)

### SOLIDS BY VOLUME:

94% (+/-1%)

### VOLATILE ORGANIC CONTENT:

Less than 50 grams per liter

### COLORS AVAILABLE:

Clear – gardner color 1-2

### RECOMMENDED FILM THICKNESS:

.10-15 mils. (when applying directly to concrete, precautions should be taken to properly prepare the substrate and the moisture content of the substrate should be tested. Do not apply to damp surfaces.)

### COVERAGE PER GALLON:

107 – 160 square feet per gallon

### PACKAGING INFORMATION:

2.5-gallon kit (other special kit sizes are available upon request. (packaging information is approximate net volume)

### MIX RATIO:

12.95 pounds' part A to 9.3 pounds' part B. The mix ratio is approximately 1.5 gallons' part A to 1-gallon part B.

### SELF LIFE:

6 months in unopened containers

### FINISH CHARACTERISTICS:

Gloss (>70 at 60 degrees @ glossmeter)

### COMPRESSIVE STRENGTH:

11,500 psi @ ASTM D695

### TENSILE STRENGTH:

3,800 psi @ ASTM D638

### ULTIMATE ELONGATION :

2.4%

### HARDNESS:

Shore D= 75

**ABRASION RESISTANCE:** Taber abraser CS-17 calibrase wheel with 1000-gram total load and 500 cycles= 20 mg loss

**ADHESION:**340 psi @ elcometer (concrete failure, no delamination, applied to shotblasted concrete)

### VISCOSITY:

Mixed= 1,000-2,000 cps (typical)

### TDG CLASSIFICATIONS:

Part A "not regulated"

Part B "not regulated"

### CURE SCHEDULE (21°C/70°F) @50% RH:

Pot life (to gel) – (150 gram mass).....greater than 2 hour  
(Actual usable working time is approximately 30 minutes, depending on environmental conditions and volumes)  
Tack free (dry to touch).....3-4 hours  
Recoat or topcoat.....3-5 hours  
Light foot traffic.....3-5 hours  
Full cure (heavy traffic)... ..24-48 hours

### APPLICATION TEMPERATURE:

10-32°C (50-90°F) with relative humidity below 85%

### PRIMER:

Recommend a suitable epoxy broadcasted base system and/or adhesion testing prior to use.

### TOPCOAT:

Optional

### LIMITATIONS:

- Color stability may be affected by environmental conditions like high humidity/chemical exposure. Exposure to some types of lighting such as sodium vapor lights may cause discolorations.
- Clarity of color may vary from batch to batch.
- Substrate temperature must be 3°C (5°F) above dew point.
- Too thick of an application may result in surface imperfections or bubble generation.
- Always apply a test patch to determine product suitability and adhesion performance for your proposed application method and procedures.
- All new concrete must be cured for at least 30 days prior to application.
- Do not expose this product to water until fully cured.
- See reverse side for application instructions.
- Physical properties are typical values and not specifications.
- See reverse side for limitations of our liability and warranty.
- Relative humidity can affect dry time and gel time

## MIXING AND APPLICATION INSTRUCTIONS

1) **PRODUCT STORAGE:** Store product at normal room temperature before using. Continuous storage should be between 15°C and 32°C (60°F and 90°F). Low temperature or temperature fluctuations may cause crystallization

2) **SURFACE PREPARATION:** The most suitable surface preparation would be a 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 start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbonding. For applications directly over concrete, Testing should be performed to confirm a moisture vapor emission rate below 3 lb/24hr/1000 ft<sup>2</sup> per ASTM F1869

3) **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.

4) **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. Maintain temperatures and relative humidity within the recommended ranges during the application and curing process. Use an air release roller tool when needed. It should be pointed out that relative humidity can have a dramatic influence on the curing characteristics. The product will dry quicker and have less working time when the relative humidity is higher while a lower relative humidity will lengthen the dry time and working time. Be sure that any tie-ins to previously applied material is also within the recommended time allotted for use as the previously applied material may begin to tack off in a short period of time.

5) **RECOAT OR TOPCOATING:** This material can be applied in multiple layers to increase build or can also be used as the final topcoat to seal in the aggregate filled base system. If you opt to recoat or topcoat this product, you must first be sure that the coating has tacked off before recoating. Always remember that colder temperatures will require more cure time for the product before recoating or topcoating can commence.

6) **CLEANUP:** Use ketone solvents or other suitable cleaning solvent

7) **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.

8) **RESTRICTIONS:** Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). 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

9) **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.**