

## TECHNICAL DATA SHEET

## HIGH BUILD 100% SOLIDS EPOXY COATING

### PRODUCT DESCRIPTION:

**MF707** is a two components 100% (+/- 1%) solids epoxy colour coating designed for applications where a high build colourfast impact resistant floor is required.

### RECOMMENDED FOR:

**MF707** is recommended for a high build topcoat or basecoat on concrete or masonry. Product is suitable in many chemical exposure environments.

### SOLIDS BY WEIGHT:

100% (+/- 1%)

### SOLIDS BY VOLUME:

100% (+/- 1%)

### VOLATILE ORGANIC COMPOUND:

Less than 2 g/l

### STANDARD COLOURS:

White – Off white – Light grey – Medium grey – Tile red – Beige – Black – Blue – Light blue – Green – Charcoal

### SAFETY COLOURS:

Safety yellow – Safety red

### RECOMMENDED FILM THICKNESS:

12-30 mils

### COVERAGE PER GALLON:

53-130 square feet per gallon @ 12-30 mils

### PACKAGING:

3 gallon kits (3.78L net approximately)

15 gallons kit (Light grey and medium grey)

### MIX RATIO:

12 lbs (1 gallon) part A to 4.15 lbs (0.50 gallons) part B (approximate volume) (standard colours)

### SHELF LIFE:

1 year in unopened containers

### FINISH CHARACTERISTICS:

Gloss (70-95 at 60 degrees @ glossmeter)

### ABRASION RESISTANCE:

Taber abraser CS-17 calibre wheel with 1000-gram total load and 500 cycles = 32 mg loss

### FLEXURAL STRENGTH:

5,400 psi @ ASTM D790

### COMPRESSIVE STRENGTH:

9,100 psi @ ASTM D695 – ½" x ½" bars

### ADHESION:

450 psi @ elcometer (concrete failure, no delamination)

### VISCOSITY:

Mixed = 1300-2300 cps (typical, most colours)

### TENSILE STRENGTH:

4,800 psi @ ASTM D638

### ULTIMATE ELONGATION:

3.1%

### GARDNER VARIABLE IMPACTOR:

50" lbs direct – passed

### HARDNESS:

Shore D = 80

Mixed = 900-1200 cps (colours); 400-900 cps (clear) (typical)

### 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 – 1.5 gallons..... 30-50 minutes

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

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

Light foot traffic... ..... 12-14 hours

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

### CHEMICAL RESISTANCE:

REAGENT	RATING
Xylene	C
Trichloroethylene	B
Methanol	A
Ethyl alcohol	B
Skydrol	B
10% sodium hydroxide	E
50% sodium hydroxide	D
10% sulfuric acid	C
70% sulfuric acid	A
10% HC1 (aq)	C
5% acetic acid	B

**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.**

### PRIMER:

Recommended; **MF015 - clear**

### TOPCOAT:

Optional – Many products are suitable as topcoats including multiple coats of this product. For added chemical resistance, colour stability, or UV stability, topcoat with a suitable aliphatic urethane

### LIMITATIONS:

- Colour stability or gloss may be affected by environmental conditions such as high humidity, low temperatures, chemical exposure or exposure to certain types of lighting such as sodium vapor lights.
- Colours may vary from batch to batch. Therefore, always use product from the same batch for an entire job.
- This product is not UV colour stable and may discolour when exposed to UV lighting. Otherwise, the colour stability of this product is good. Therefore, a topcoat is optional and dependent on the environment.
- Light or bright colours may require a suitable primer or topcoat in order to achieve a satisfactory hide.
- 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.
- Apply a suitable primer before using this product as a coating.

### 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:** A suitable primer such as **MF015** should be used before applying this product. If a primer is not used, more porous substrates may cause outgassing and possible surface defects.
- 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. 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 spike roller tool should be used prior to the coating tacking off to remove the air entrapped in the coating.
- 6) **RECOAT OR TOPCOATING:** If you opt to recoat or topcoat this product, you must first be sure that the coating has tacked off before recoating. However, all previous coats should be deglossed to insure a trouble free bond prior to application of recoats or topcoats. Colder temperatures will require more cure time for the product before recoating or top coating can commence. Before recoating or top coating, 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 top coating or recoating. Many epoxy coatings and urethanes as well as multiple coats of this product are compatible for use as a topcoat.
- 7) **CLEANUP:** Clean tools and equipment with an epoxy cleaner/thinner (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.**