

TECHNICAL DATA SHEET

FAST SET WATER BASED EPOXY SEALER

PRODUCT DESCRIPTION:

MF013 is a two component water based epoxy coating that exhibits excellent characteristics that rival solvent based products. **MF013** has good chemical resistance, abrasion resistance, and substrate penetration. This product has a tack free time of about 3 hours and can support traffic in as little as 6-12 hours.

RECOMMENDED FOR:

MF013 is recommended for priming or coating concrete, wood or masonry. This product can withstand exposure to many common solvents and chemicals.

SOLIDS BY WEIGHT:

43% (+/- 2%)

VOLATILE ORGANIC COMPOUND:

1.2lbs. per gallon (mixed) (regulatory VOC = 250g/l)

STANDARD COLOURS:

Clear

NOTE: The clear is not water clear and is not suitable for top coating over previously colour coated floors. The clear is suitable as a primer or concrete sealer only.

RECOMMENDED THICKNESS:

5-7 mils per coat wet thickness (yields 2-3.5 mils dry)

COVERAGE PER GALLON:

229 to 320 square feet @ 5-6 mils wet thickness / gallon

PACKAGING

2 gallon kits

MIX RATIO:

6.95lbs. part A (0.80 gallons, approximately) to 1.75lbs. part B (0.20 gallons, approximately).

SHELF LIFE:

1 year in unopened containers

FINISH CHARACTERISTICS:

Gloss (>60 @ 60 degrees @ glossmeter)

ABRASION RESISTANCE:

Taber abrasor CS-17 calibrase wheel with 1000-gram total load and 500 cycles = 45 mg loss

IMPACT RESISTANCE:

Gardner Impact, direct = 50 in. lb. (passed)

FLEXIBILITY:

No cracks on a 3mm (1/8") mandrel

ADHESION:

425 psi @ elcometer (concrete failure, no delamination)

APPLICATION TEMPERATURE:

13°C – 32°C (55°F – 90°F) with relative humidity below 85%

VISCOSITY:

400-900 cps (typical)

TDG CLASSIFICATIONS:

"not regulated"

DRYING TIMES: (21°C / 70°F) @50% RH

Pot life – 1 gal..... 2.0 hours
 Tack free (dry to touch) 2-4 hours
 Recoat or topcoat..... 4-6 hours
 Light foot traffic... 6-12 hours
 Full cure (heavy traffic) 2-5 days

APPLICATION TEMPERATURE:

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

CHEMICAL RESISTANCE:

REAGENT	RATING
5% Acetic acid	B
Xylene	B
Mek	A
Gasoline	B
10% sodium hydroxide	C
10% sulfuric	B
10% hydrochloric acid	B
20% nitric acid	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.

PRIMER:

Not required

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 or gloss may be affected by humidity, low temperatures, chemical exposure, or sodium vapor lighting.
- Product will yellow in the presence of UV light.
- For best results use a 10mm nap roller.
- Slab on grade requires moisture barrier.
- Substrate temperature must be 3°C / 5°F above dew point
- All new concrete must be cured for at least 30 days.
- Product colour will vary from batch to batch. Always use product from same batch for an entire job.
- Improper mixing or too thick of an application may result in product failure.

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MIXING AND APPLICATION INSTRUCTIONS

- 1) **PRODUCT STORAGE:** Store product at normal room temperature before using. Continuous storage should remain between 15°C – 32°C (60°F – 90°F). Keep from freezing.
- 2) **SURFACE PREPARATION:** Surface preparation will vary according to the type of complete system to be applied. For a one or two coat thin build system (3-10 mils dry) we recommend either mechanical scarification or acid etching until a suitable profile is achieved. For a complete system build higher than 10 mils dry, we recommend a fine brush blast (shot blast). All dirt, oil, dust, foreign contaminants and laitance must be removed to assure a trouble free bond to the substrate. A test should be made to determine that the concrete has an appropriate vapor barrier. This can be done by placing a 4' X 4' 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 does not show signs of eventual hydrostatic pressure problems that may later cause disbonding. However, this product can be applied to a damp floor as long as there are no standing puddles
- 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. Maintain temperatures and relative humidity within the recommended ranges during the application and curing process. **When the end of the pot life has been reached, you will find that the material becomes hard to apply and will actually tend to roll back up onto the roller. Do not try to continue application when the coating has reached this step. Applications made at different times with differing environmental conditions, may show slight variations in gloss.**
- 5) **RECOAT OR TOP COATING:** If you opt to recoat or topcoat this product, you must first be sure that all of the solvents and water have evaporated from the coating during the curing process. The information on the front side are reliable guidelines to follow. However, it is best to test the coating before recoating and top coating. This can be done by pressing on the coating with your thumb to verify that no fingerprint impression is left. If no impression is created, then the recoat or topcoat can be started. Always remember that colder temperatures will require a longer cure time for the product before recoating or top coating can commence. Before recoating or top coating, check the coating to insure no epoxy blushes were developed (a whitish, greasy film or deglossing). If a blush is present, it must be removed prior to top coating or recoating. A standard type detergent cleaner can be used to remove any blush. Many epoxy overlays and coatings as well as urethanes are compatible for use as a topcoat for this product as well as multiple coats of this product.
- 6) **CLEANUP:** Use lukewarm soapy water if the product is still of liquid consistency, use acetone if it is sticky and use xylene if it is almost dry.
- 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 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.
- 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.