

TECHNICAL DATA SHEET CHEMICAL RESISTANT COLOURED NOVOLAC EPOXY

PRODUCT DESCRIPTION:

MF253 is a two-component coloured high solids Novolac epoxy coating designed for application where splash and spills of acids, chemicals, and solvents occur.

RECOMMENDED FOR:

MF253 is recommended for a high build topcoat for traffic areas, chemical troughs and curbs as well as tanks and chemical spill areas for cement masonry or brick.

SOLIDS BY WEIGHT:

Mixed= 96% (+/- 1%)

SOLIDS BY VOLUME:

94% (+/- 1%)

VOLATILE ORGANIC COMPOUNDS:

180 g / gallon (mixed)

STANDARD COLOURS:

Light grey, medium grey, and tile red

RECOMMENDED FILM THICKNESS:

16-18 mils

COVERAGE PER GALLON:

90-100 square feet per gallon @ 16-18 mils

PACKAGING:

3 gallon kit (volume approximate)

MIX RATIO:

10.15 lbs (1 gallon) part A to 4.2 lbs (.50 gallons) part B (volumes approximately) (2:1)

SHELF LIFE:

1 year in unopened containers

FINISH CHARACTERISTICS:

Gloss (>40 at 60 degrees @ Erichsen glossmeter)

FLEXURAL STRENGTH:

9,610 psi @ ASTM D790 - ½"X ½" bars span 4"

COMPRESSIVE STRENGTH:

9,900 psi @ ASTM D695

TENSILE STRENGTH:

6,680 psi @ ASTM D638

ADHESION:

425 psi @ elcometer (concrete failure, no delamination)

ULTIMATE ELONGATION:

4.7%

HARDNESS:

Shore D = 88

GARDNER VARIABLE IMPACTOR:

50" lbs direct – passed

ABRASION RESISTANCE:

Taber abraser CS-17 calibre wheel with 1000 gram total load and 500 cycles= 20 mg loss

VISCOSITY:

Mixed = 2200-2700 cps (typical)

TDG CLASSIFICATIONS:

Part A "not regulated" Part B "LIMITED QUANTITY"

HEAT DEFLECTION TEMP.:

46°C (115.5°F), ASTM D648

APPLICATION TEMPERATURE:

15°C – 35°C (60°F – 95°F) with relative humidity below 90%

DRYING TIMES: (21°C / 70°F) @ 50% RH

Pot life – (1 ½ gallon volume)25-35 minutes
 Tack free (dry to touch)5-7 hours
 Recoat or topcoat.....5-10 hours
 Light foot traffic.....10-18 hours
 Full cure (heavy traffic)2-7 days

CHEMICAL RESISTANCE:

REAGENT	RATING
Xylene	D
1,1,1 trichloroethane	C
MEK	C
Methanol	C
Ethyl alcohol	C
Skydrol	C
10% sodium hydroxide	E
50% sodium hydroxide	E
10% sulfuric acid	E
70% sulfuric acid	C
10% HCl (aq)	D
5% acetic acid	D

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 **MF257**

TOPCOAT:

Not recommended

LIMITATIONS:

- Colour stability or gloss may be affected by environmental conditions such as high humidity, low temperature, 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.
- Apply a suitable primer before using this product
- This product is not UV colour stable and may discolour when exposed to UV lighting.
- Mixtures of chemicals and applications with exposures to chemicals at elevated temperatures should be thoroughly evaluated before applying coating. A test patch is recommended.
- Product can develop surface irregularities in leveling in combination to some chemical contamination or substrate compositions.
- Substrate temperature must be 3°C / 5°F above dew point.
- For best results, apply with a 5mm (1/4") nap roller.
- All new concrete must be cured for at least 30 days prior to application.

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. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbonding.
- 3) **PRIMING:** A suitable primer such as **MF257** 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 material can be applied by brush or roller. However, the material can also be applied by a suitable serrated 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 roller tool should be used prior to the coating tacking off to remove the air entrapped in the coating.
- 6) **RECOAT OR TOP COATING:** 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 topcoating can commence. Before recoating or topcoating, 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 topcoating or recoating. Multiple coats of this product are acceptable and can be used to achieve greater chemical resistance and build.
- 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."