

TECHNICAL DATA SHEET

LOW MODULUS FAST SET EPOXY GEL

PRODUCT DESCRIPTION:

MF821 is two components 100% solids epoxy gel designed for shallow repair on either vertical or horizontal surfaces. This product is easy to mix and use and has the consistency of Vaseline petroleum jelly. Additionally, because the product is a 100% solids product, it can be applied thicker on horizontal surfaces when required.

RECOMMENDED FOR:

MF821 is recommended for repairing cracks and defects in concrete or masonry. The fast set time makes this product an ideal quick repair gel.

SOLIDS BY WEIGHT:

100%

SOLIDS BY VOLUME:

100%

VOLATILE ORGANIC COMPOUND:

Zero lbs per gallon

STANDARD COLOURS:

Amber clear- semi-transparent

RECOMMENDED FILM THICKNESS:

3mm (1/8") cracks or thin build repairs

COVERAGE PER GALLON:

0.13 cubic feet or 1,228 lineal feet @ 3mmx3mm (1/8"x 1/8")

PACKAGING:

2 gallon kits (17.0 lbs net approximately)

MIX RATIO:

1 gallon part A (9.0 lbs) to 1 gallon part B (8.0 lbs) (volumes and weights approximate)

SHELF LIFE:

1 year in unopened container

ABRASION RESISTANCE:

Taber abraser CS-17 calibre wheel with 1000-gram total load and 500 cycles = 52 mg loss

HEAT DEFLECTION TEMPERATURE:

47°C (116.5°F)

FLEXURAL STRENGTH:

8,590 psi @ ASTM D790

COMPRESSIVE STRENGTH:

6,110 psi @ ASTM D695- 1/2" x 1/2" bars

TENSILE STRENGTH:

4,980 psi @ ASTM D638

ULTIMATE ELONGATION:

14.1%

GARDNER VARIABLE IMPACTOR:

50 in. lbs. direct – passed

ADHESION:

360 psi @ elcometer (concrete failure, no delamination)

HARDNESS:

Shore D= 35

VISCOSITY:

Mixed= 3,000,000 cps (typical)

APPLICATION TEMPERATURE:

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

TDG CLASSIFICATIONS:

Part A "not regulated"

Part B "LIMITED QUANTITY "

CHEMICAL RESISTANCE:

| <u>REAGENT</u> | <u>RATING</u> |
|-----------------------|---------------|
| Butanol | C |
| Xylene | B |
| 1,1,1 trichloroethane | B |
| MEK | A |
| Methanol | A |
| Ethyl alcohol | A |
| Skydrol | B |
| 10% sodium hydroxide | E |
| 50% sodium hydroxide | D |
| 10% sulfuric acid | C |
| 70% sulfuric acid | A |
| 10% HCl (aq) | C |
| 5% acetic 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: This product can be top coated with many suitable epoxy and urethane products.

LIMITATIONS:

- Colour stability may be affected by environmental conditions such as high humidity, temperatures, chemical exposure or exposure to certain types of lighting such as sodium vapor lights.
- Colors or clarity may vary from batch to batch.
- This product is not UV colour stable and may discolour when exposed to UV light sources.
- Substrate temperature must be 3°C/5°F above dew point.
- This product has a very short pot life. Therefore, only mix an amount that can be used in a short period of time.
- Do not topcoat over this product until it has sufficiently hardened.
- 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 before using. Continuous storage should be between 15°C – 32°C (60°F – 90°F). Low temperatures or temperature fluctuations may cause crystallization.
- 2) **SURFACE PREPARATION:** 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 then 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 repair work. This product is intended for hairline cracks and other fractures up to 3mm (1/8") in width. Remove all unsound concrete from within the crack to be repaired and thoroughly vacuum all debris and dust from within the crack opening.
- 3) **PRODUCT MIXING:** Ensure that each component is homogenous. 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. Mix only an amount of material that can be used in a short period of time. A two gallon volume of material will have a usable pot life of about 7-10 minutes. Smaller volumes will be easier to work with as well as adding more time to the usable pot life. Improper or insufficient mixing may result in product failure.
- 4) **PRODUCT APPLICATION:** The mixed material can be applied by marginal trowel, putty knife, or any other suitable equipment.
- 5) **RECOAT OR TOP COATING:** When placing a topcoat over a repaired crack, allow the material to cure before installing the coating. If excessive amounts are spread well beyond the crack repair or in areas where surface repairs have been implemented, it is best to check the cured areas for any possible amine blush (a whitish, greasy film or deglossing) prior to coating over this material. 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 coatings and urethanes are compatible for use over this product as well as multiple coats of this product.
- 6) **CLEANUP:** Use Xylene
- 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 and process tested.
- 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.