MF 1650

Membrane Epoxy 100% Solids

Product Description

MF1650 is a 2-component, 100% solids, self-leveling and high-build flexible epoxy membrane coating. It is designed to be used as a seamless flexible floor coating to protect substrates against water infiltration. MF1650 is a specifically formulated to provide high elongation, excellent adhesion, abrasion, impact and chemical resistance.

Areas of application

- ➤ Industrial Use Parking decks; Warehouses; Airports and hangars; Processing and manufacturing plants
- > Mechanical room
- ➤ Residential Use Balcony terraces

Packaging and Recommended Thickness

MF1650 is offered in the following kit size:

➤ 3-gallon kit (7.56L resin (A) and 3.78L hardener (B))

Recommended Film Thickness: 20-25 mils (65-80 sq. ft/gallon)

Surface Preparation

Remove dust, dirt, grease, oil and all other contaminants with proper cleaner/degreaser. Prepare the surface mechanically as per ICRI-CSP2 profile by diamond grinding to ensure removal of laitance, curing agents and sealers. The compressive strength of a newly poured concrete substrate must be at least 25 MPA (3635 psi) after 28 days cure and at least 1.5 MPA (218 psi) tensile strength. Be careful with condensation (within 10 degrees of the dew point). All cracks, holes and irregularities must be repaired with our epoxy crack filler prior to applying the coating. Porous concrete may require a coat of MF2600 as a primer to seal surface adequately before application of membrane.

Mixing Instructions

The products must be stored between for 18°C (65°F) and 30°C (86°F) prior to application.

Pre-mix each component separately for 2-3 minutes each. Open container with 2 parts of component A in it, then add the 1 part of component B to it (mixing ratio 2:1). Mix the components for at least 2-3 minutes using a low-speed drill (300-450 rpm) to reduce air entrapment and to obtain a homogeneous mixture.

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Product Application

- **1.** Apply coat of MF1650 using a rubber squeegee and roll to obtain a uniform coating (using a fine quality 10mm roller).
- 2. Can be topcoated with MF Performance Epoxy and Urethane Coating. (Consult your MF Representative for proper topcoat).

Clean equipment with xylene. Once the product has hardened, it may only be removed mechanically.

Product Restrictions

- Not recommended for application at temperatures below 10°C / 50°F or above 30°C / 86°F.
- ➤ Ambient humidity of the surroundings should not exceed 85% during application and during curing process.
- > Substrate must be clean, sound and dry.
- ➤ Substrate temperature must be 3°C (5.5°F) above measured dew point.
- \triangleright Humidity content of substrate must be < 4% at time of application.
- > Do not apply on porous surfaces where a transfer of humidity may occur during the application.
- > Applying this product on a substrate without a moisture barrier may risk delamination due to hydrostatic pressure.
- Freshly applied product must be protected against moisture, condensation and water for at least 48 hours.
- > Surface discoloration of product may occur when exposed to UV rays.
- Exposure during the curing stage of the coating to the by-products of propane combustion may cause discoloration (amine blushing)

Health and Safety

Components A and B contain toxic and corrosive ingredients. Consult the safety data sheet (S.D.S) for further information.

Technical Properties

Mix Ratio:	By volume: 2-parts resin (A) to 1-part hardener (B) By weight: 100g of resin (A) to 42g of hardener (B)
Viscosity:	Resin (A): 3000-3500 cps Hardener (B): 1000–1500 cps Mixed: 2000-2500 cps
Pot Life (142g):	40 minutes at room temperature



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Physical Properties

Solids by Weight:	100% (+/-1%)
Shelf Life:	1 year in unopened containers
Elongation at break:	300%, ASTM D638
Tensile Strength at break:	10.4 MPa, ASTM D638
Peel Strength, N/mm2	23, ASTM D638
Hardness:	Shore $D = 82$, ASTM D2240
Application Temperature:	15°C-21°C with relative humidity below 85%
Drying Times:	21°C / 70°F @ 50% relative humidity (Cure times vary depending on temperature) Re-coat or topcoat: 18-24 hours Light foot traffic: 24 hours Full cure (heavy traffic) -7 days

Disclaimer

The information and recommendations contained in this technical data sheet are based on reliable test results according to MF Paints. The data mentioned are specific to the material indicated. If used in combination with other materials, the results may be different. It is the responsibility of the user to validate the information therein and to test the product before using it. MF Paints assumes no legal responsibility for the results obtained in such cases. MF Paints assumes no legal responsibility for any direct, indirect, consequential, economic or any other damages except to replace the product or to reimbursement the purchase price, as set out in the purchase contract.