

UP-M: URETHANE MEMBRANE

TECHNICAL DATA SHEET

DESCRIPTION

UP-M is a solvent less, two component urethane waterproofing membrane. It is designed to be used as a layer to bridge new cracks in concrete. It exhibits very good mechanical properties, such as high elongation and tear resistance.

ADVANTAGES

- Economical and easy to apply
- Highly resistant waterproof elastomer
- Solvent-free, low odor and fast curing for accelerated turnaround
- Pre-measured packaging

TECHNICAL DATA

PACKAGING	3 US GAL (11.35 L)
COLOR	PART A: LIGHT GREY PART B: AMBER MIX: LIGHT GREY
RECOMMENDED THICKNESS	20 MILS (80 FT ² /GAL)
SHELF LIFE	12 months in original unopened factory sealed containers. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards.
MIX RATIO, BY VOLUME	A:B = 2:1
MIX RATIO, BY WEIGHT	A:B = 100:55
POT LIFE 16 OZ (454 G)	30-45 minutes @ 77°F (25°C)
VOC	0 g/L

PROPERTIES

@ 73°F (23°C) AND 50% R.H.

SOLIDS CONTENT, BY VOLUME (CLEAR)	PART A: 93% PART B: 78% MIX: 85%
SOLIDS CONTENT, BY WEIGHT (CLEAR)	PART A: 92% PART B: 75% MIX: 83%
DENSITY (KG/L)	PART A: 1.06 PART B: 1.15 MIX: 1.11

* Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.

* The indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage. *

THINNER RECOMMENDED	Xylene
CURING INFORMATION	Light loading: 12 hours@50°F (10°C) - 8: hours@68°F (20°C) - 6: hours@86°F (30°C) Full-loading: 72 hours@50°F (10°C) - 60: hours@68°F (20°C) - 48: hours@86°F (30°C) Full cure: 7 day
ABRASION RESISTANCE, ASTM D4060 TABER ABRASER CS-17 WHEEL / 1000G (2.2 LBS.) / 1000 CYCLES	6 mg loss
WATER ABSORPTION, ASTM D570	0.25 %
HARDNESS (SHORE A), ASTM D2240	70-80
VISCOSITY @ 77°C (25°C)	Part A: 4000-5000 cps Part B: 150-250 cps A/B Mix: 4000-5000 cps
TENSILE STRENGTH, ASTM D638	1100 PSI
ELONGATION AT BREAK, ASTM D638	200-250 %
TEAR STRENGTH (PLI), ASTM D624	200

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SURFACE PREPARATION

Old concrete

Concrete surface must be cleaned. BLASTRAC, sand blasting, diamond grinder w/30 grit or coarse, or water blasting is highly recommended to remove surface contaminants. Any oils and fats must be removed prior to product application. Acid etching may be required (followed by a thorough rinsing) to open the pores of the concrete to accept a primer. Do not apply to wet substrates. Chloride, moisture, and pH levels should be checked prior to application.

New concrete

The concrete should be allowed to cure for a minimum of 30 days. Compression resistance of concrete must be at least 25 MPa (3625 lb/inch²) after 28 days and traction resistance must be at least 1,5 MPa (218 lb/in²). BLASTRAC, sand blasting, diamond grinder w/30 grit or coarser or acid etching (followed by a thorough rinsing) is required to remove the surface laitance that appeared during the curing process. A primer should be used to reduce out-gassing and promote adhesion.

MIXING

Materials should be pre-conditioned to a minimum of 50°F (10°C) prior to use. Thoroughly mix each component separately. Pour component B into component A using the proper mixing ratio of 2A:1B by volume. Mix both components for at least 1 minute using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life of mixture.

APPLICATION

Apply mixed product on the prepared surface tightly (thin film) using a rubber rake and pass a roller to obtain a uniform coating. Avoid creating puddles.

CLEANING

Clean all tools and materials with the cleaner/thinner for urethanes. Wash hands and skin carefully with warm soapy water. Once product has hardened, it may only be removed through mechanical means.

RESTRICTIONS

- Minimum/Maximum temperature of substrate: 50°F / 86°F (10°C / 30°C)
- Maximum relative humidity during application and curing: 80 %
- Substrate temperature must be 5.5°F (3°C) above dew point measured
- Humidity content of substrate must be < 4 % when coating is applied
- Do not apply on porous surfaces where a transfer of humidity may occur during application
- Avoid exterior use on substrates at ground level
- Protect from humidity, condensation and contact with water during the 24 hour initial curing period.
- Surface may discolor in areas exposed to regular ultraviolet light

HEALTH AND SAFETY

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse.

Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation.

Consult the material safety data sheet for further information.

IMPORTANT NOTICE

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