

# EPITHANE PU 800

## SINGLE COMPONENT POLYURETHANE WATERPROOFING MEMBRANE

### DESCRIPTION

**EPITHANE PU 800** is an improved elastomeric liquid applied polyurethane based coating formulated to give a long-lasting, maintenance free and superior waterproofing protection for concrete and steel substrates.

### USES

**EPITHANE PU 800** is ideally suited for use in fully expose roofing, substructures, balconies, podium decks, landscaped areas, ponds, box gutters, planter boxes, sill flashing, plant room floors.

**EPITHANE PU 800** provides an excellent wet-areas membrane barrier under tiles or other rigid surfacing to shower trays, bathrooms floors and walls, laundries, kitchens or patios. Most premium quality water resistant grade ceramic tile adhesives, suitable for application to an impermeable surface, will be compatible with **EPITHANE PU 800**.

### ADVANTAGES

- ✓ Chemical Resistant: Resists deterioration from dilute acids & alkali, oil, salts, bacteria and common fuels
- ✓ Long Life: Permanently Flexible
- ✓ Single Component: Easy to Apply
- ✓ High Strength & Hard Wearing
- ✓ No Blistering of Coating
- ✓ Contain Anti-root properties
- ✓ Long Term Resistance to Poned Water
- ✓ Excellent & Tenacious Adhesion with Elastic Recovery

### SURFACE PREPARATION

Ensure all surfaces are clean and free from dust and oil.

Fill any gaps, expansion joints, etc. with a compatible low modulus PU sealant. Surfaces should then receive a coat of CHEMIND **Chemcoat SB** at 5-6 m<sup>2</sup> per litre.

Allow to cure for at least 4-5 hours prior to over coating with **EPITHANE PU 800**.

Two or more thick coats of **EPITHANE PU 800** liquid membrane should then be applied to all internal corners, sills, hobs, outlets, penetrations, cracks, etc. and each coat allowed to dry fully.

**NOTE:** Mortar fillets to internal corners are not necessary unless instructed by Consultants

### PHYSICAL AND TECHNICAL PROPERTIES

Color	Dark Black
Composition	Moisture trigger aromatic Polyurethane
Small	Strong solvent odour
Density	1.45 ± 0.1 g/cc @ 30 °C
Solid Content	> 85%
Elongation at break (ASTM D412-06a)	> 500%
Tensile Strength (ASTM D412-06a)	> 1.5 N/mm <sup>2</sup>
Recovery from 350% Elongation (ASTM D412-06a)	95%
Water Vapor Transmission (ASTM E96:2005)	0.68 g/m <sup>2</sup> h (16 g/m <sup>2</sup> d)
Penetration Hardness (ASTM D 5)	18.1 dmm
Adhesion to Substrate (ASTM D4541:2009)	0.5 N/mm <sup>2</sup>
Shore A Hardness (ASTM D2240:2005)	40-50
Adhesion in peel after water immersion (unprimed surface) (ASTM C836)	> 3.5 kN/m
Total Water Absorption (ASTM D570:2005)	0.98%
Water Tightness (BS EN 1928:2000)	No dampness under of substrate
Crack Bridging Ability	1.5 mm
Service Temperature Trafficability (Based on DFT of 1 mm at 25 °C, 40% RH)	5 °C to 45 °C
Foot Traffic	24 Hrs
Vehicle	72 Hrs

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Cracks: All shrinkage shall be treated with a 1.5 mm coating of **EPITHANE PU 800** at 150 mm wide, centred over the crack. Moving structural cracks greater than 2 mm shall be routed out and treated with POLYSEAL 1PUA or any other CHEMIND approved PU sealant.

Note: **EPITHANE PU 800** can accommodate movement from 0 to 1.6 mm when fully cured at 1.5 mm thickness. It can withstand a simulated 30 metres head of water while bridging a 1.6 mm crack when fully cured at 1.5 mm thickness.

### APPLICATION

Mix **EPITHANE PU 800** for 3-5 minutes with a mechanically drill fitted with a proprietary paddle prior to application so that a homogenous mix is achieved.

Apply the **EPITHANE PU 800** liquid membrane coating by brush, roller, squeegee, trowel or spray in multiple coats at a rate of 1.1 L/m<sup>2</sup>/coat (DFT @ 1.0 mm), to achieve a minimum dry film thickness (DFT) of 2.0 mm.

Apply second coat on the first coat only after first coat is tack-free. Allow at least 72 hours curing period prior to installing protective screed.

Application will be in 2 to 3 coats, depending on the porosity and texture of the substrate. **EPITHANE PU 800** products usage averages 1.5 litres per m<sup>2</sup> depending on surface texture and the dry film build.

Allow at least 72 hours of curing time prior to installation of protective screed. A thin layer of silica sand may also be broadcast on the second coat whilst wet, to provide mechanical bonding to the protective screed.

### CLEAN UP

Uncured **EPITHANE PU 800** may be removed with a suitable solvent immediately after use. Hardened materials can be scrubbed mechanically only after dipping in solvent.

Allow the waste to cure. Seal it into a suitable container and bury in landfill.

### COVERAGE

Theoretical coverage of **EPITHANE PU 800** per 18 Litre pail is 16 m<sup>2</sup> for 1.0mm DFT.

*\* Theoretical coverage only applies to a smooth non-porous substrate. When estimating quantity take off, it is normal to add another 10-15% to the initial estimate to account for wastage and surface irregularities.*

### PACKAGING

**EPITHANE PU 800** membrane is available in 20 kg pails and 200 kg drums.

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### SPECIAL NOTES

Do not apply the coating on wet or damp surfaces.

Provide adequate ventilation when installing in confined areas or spaces.

**EPITHANE PU 800** contains tar/bitumen, therefore it is toxic in its liquid state. It should not be used in potable water retaining structures.

Always use protective hand gloves and mask when handling or applying **EPITHANE PU 800**.

**EPITHANE PU 800** contains modified asphalt petroleum. Therefore, it should not be used in potable water retaining (or) marine life holding structures.

As the coating is not UV stable, adequate protective like cement and sand screed or protective concrete should be applied on top of **EPITHANE PU 800** after fully cure.

To ensure unwanted blistering, or cratering effect after application, ensure that the substrate is well-primed, allowed to dry and subsequently multiple layers of thin coating applied rather than in thicker coat application.

**EPITHANE PU 800** is a waterproof coating, not a trafficable coating. Only flat soled rubber shoes should be worn during application to avoid indentation damage or puncture to coating during application and during service.

It the pail is opened for application, use all contents of the pail within the same day.

### SCOPE OF REGISTRATION AND STANDARDS



Manufacture of Waterproofing materials.  
Compliance SIRIM testing.  
Compliance with ASTM technical standards and AS 3740 - 2004 Australia Standard.



Legal Notes:  
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