

# ShaliUrethane<sup>®</sup> LM



STP Limited

1K UV Resistant PolyUrethane Waterproofing Liquid Membrane

## Description

**ShaliUrethane<sup>®</sup> LM** is a single component aliphatic isocyanate base polyurethane elastomeric liquid, which cures in presence of atmospheric moisture to form a UV resistance, seamless, waterproofing membrane. **ShaliUrethane<sup>®</sup> LM** conforms to ASTM C-836 and ASTM C-898.

**ShaliUrethane<sup>®</sup> LM** is used for horizontal / vertical applications. For horizontal or vertical applications, please use horizontal or vertical grades of **ShaliUrethane<sup>®</sup> LM** respectively.

## Characteristics

Application	Brush / Roller / Airless Spray	UV Resistance	Excellent
Tack free time, hr	8 -10	Final cure time, hr, solid	24 - 36
Solid content, %	85 ± 2	Loss of weight, %	15 ± 2
Hardness - Shore A	12-16	Tensile strength, MPa	1.2 ± 0.1
- Shore 00	50-60	Elongation, %	> 500
Service temp, range, °C	- 40 to + 70	Swelling in water	Nil
Crack bridging at low temperature at minus 9 °C, mm	Passed over 1.5	VOC Content, gm / kg	150 ± 20
Theoretical Coverage Kg / m <sup>2</sup> for 1 mm DFT *	1.4 *	Chemical stability	Resistant to most mild acids and alkalis
Adhesion to primed concrete, Pull strength MPa	2.5 ± 0.2	Extension after heat aging, mm	6.4 with no cracking

\* Depending upon surface condition.

## Application

- Tunnels.
- Roof / Terraces.
- Terrace garden.
- Podium.
- Retaining walls.
- Planter boxes.
- Green House.

## Advantages

- Easy to apply.
- Easily repairable.
- Exhibits good waterproofing character with high elongation property.
- Excellent adhesion to concrete.
- Resistance to Root Growth.

## Application Methodology

- Remove all loose gravel, dirt, oil, grease and foreign matter by jet or dry air and clean the surface mechanically or by grinding to make it smooth before application. Ensure that the prepared surface is moisture free.
- Ensure that the minimum slope gradient of 1 in 100 (1 in 80 for large roof slopes) is maintained.
- Stir **ShaliUrethane<sup>®</sup> LM** by a slow speed mixture (400 – 500 rpm) fitted with a suitable mixing paddle to ensure a homogenous mix. After stirring, wait for the product to settle in order and to let entrapped air escape.

- Skin formation may happen on the top of material during humid condition. In that event, cut skin from the periphery of the container and remove it and then stir it as mentioned above.
- Apply a coat of ShaliPrime PUM @ 8 -10 m<sup>2</sup> / L and allow it to dry.
- Apply **ShaliUrethane<sup>®</sup> LM** @ 1.4 kg / m<sup>2</sup> for 1000 microns DFT (theoretical coverage depending on surface conditions) by brush/ roller / airless spray. Preferably, apply the entire quantity in two coats. STP recommends use of ShaliGeoText 50 gsm as reinforcement in between two layers.
- Sprinkle fine sand @ 200 gsm over the final coating when the surface is still tacky, i.e. after around 10 hrs - 15 hrs of the coating of top layer. After complete curing of surface, remove excess/loose sand by brush.
- Apply vertical grade of **ShaliUrethane<sup>®</sup> LM** on all parapet, projection, etc, In case height of parapet is up to 450 mm, treatment shall be taken up to the top of parapet, otherwise, if height is more than 450 mm, the treatment shall be terminated at a height of 300 mm above the finished roof level.
- **Use the material within 4 hours of opening of the container.**
- Ensure final curing time of 36 hrs before allowing / carrying out any further work.
- Apply ShaliGeoText 250 gsm over fully cured sand sprinkled applied surface. Before laying minimum 50 mm screed protection.
- For Heavy duty area, apply 3<sup>rd</sup> coat of **ShaliUrethane<sup>®</sup> LM** @ 0.5 kg / m<sup>2</sup>.

### Health & Safety

- Do not allow ShaliUrethane LM to come in contact with the skin and eyes, or be swallowed.
- Wear suitable protective clothing, gloves and eye protection.
- In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice.
- If swallowed seek medical attention immediately - **do not** induce vomiting. In case of fire use dry chemical or carbon dioxide extinguishers.

### Packing

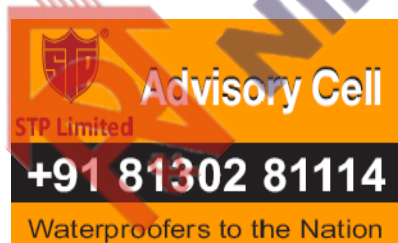
Available in 20 kg packing.

### Storage

Store in a cool dry clean place at 4 °C to 27 °C in original sealed containers. Sometime an easily Removed protective skin of **ShaliUrethane<sup>®</sup> LM** may form on top during storage, which does not affect performance of the product.

### Shelf Life

6 Months in original unopened sealed condition.



**STP's Businesses**  
**Waterproofing & Insulation**  
**Road Surfacing**  
**Pipeline Coating**  
**Repairs & Rehabilitation**  
**GARA (Grouts & Admixtures)**  
**Other Powder Products**  
**Sealant & Additives**  
**Epoxy Flooring**  
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**Other Products**

