

# ShaliUrethane<sup>®</sup> LM UV

2K UV Resistant Aliphatic PU WP Liquid Membrane



STP Limited

## Description

**ShaliUrethane<sup>®</sup> LM UV** is two component, aliphatic, polyurethane elastomeric liquid membrane for waterproofing.

**ShaliUrethane<sup>®</sup> LM UV** forms a seamless monolithic membrane, which cures in reaction with resin and hardener to form a UV resistance waterproofing membrane.

It conforms to ASTM C-836 and C-898.

## Characteristics - Physical

Application	Brush / Roller	Drying time	
Pot life, 100 g, 27 °C, minutes	40 ± 2	• Tack free time, hrs	2 - 3
Tear strength, N/mm <sup>2</sup>	30 ± 5	• Final cure, days	28
UV Resistance	Excellent	Solid content, %	82 ± 2
Theoretical Coverage* WFT, Kg / m <sup>2</sup>		Chemical stability	Resistant to most mild acids and alkalis
• For 1 mm	1.97	Service temperature, °C	-40 to 70
• For 1.2 mm	2.36	Mixing ratio, w/w	1.7 : 1
Extension after heat aging, mm, with no cracking	6.4	VOC, grm / kg	180
Recovery @ 200% Elongation, %	98 ± 2		

\* Depending upon surface condition.

## Characteristics - Technical

Propertie	Standard	Results
Elongation, %	ASTM D 412	500 ± 10
Tensile strength, MPa	ASTM D 412	2.2 ± 0.2
Hardness Shore A	ASTM D 2240	65 ± 2
Crack bridging at low temperature at minus 9 °C, mm	ASTM C 836	≤1.5
Adhesion to primed concrete, pull strength N/m	ASTM C 836	180 ± 2

## Application

- Tunnels.
- Roof / Terraces / Dome.
- Railways Coaches.
- As a final / protective top coat over ShaliUrethane<sup>®</sup> LHM.

## Advantage

- Excellent Waterproofing Characteristics.
- High Crack Bridging.
- Monolithic and Seamless Membrane.
- Excellent adhesion to concrete.
- Resistance to root growth.
- High Durability & better color fastness Property.
- Excellent UV resistance.

## Application Methodology

### ➤ Surface Preparation

- Remove all loose gravel, dirt, oil, grease and foreign matter by jet of dry air and clean the surface mechanically or by grinding to make it smooth before application.
- Repair all cracks by cutting “V” groove and fill with PMC mortar prepared in the ratio of ShaliCrete: Cement: Sand (1: 2: 5).
- Provide 50 mm x 50 mm coving made out of PMC mortar as above.
- Ensure that the moisture content in the prepared surface does not exceed 5% immediately before application of **ShaliUrethane<sup>®</sup> LM UV**.

### ➤ Material Preparation

- Stir Component A by a slow speed mixture, fitted with a suitable mixing paddle to ensure a homogenous mix.
- After stirring, wait for the product to settle in order to let entrapped air escape.
- Then add Component B into Component A and stir with slow speed mixing paddle.
- Use the material within 40 minutes of opening the container.

### ➤ Application of Material

- Apply a coat of ShaliPrime PUM / ShaliPrime 2E @ 8 -10 m<sup>2</sup> / L.
- **For 1 mm DFT**
  - Apply first coat of **ShaliUrethane<sup>®</sup> LM UV** @ 0.98 kg / m<sup>2</sup> by brush / roller while the primed surface is tacky. For faster and smoother application, airless spray is preferred.
  - Spread fiber glass net of 45 GSM with overlaps of 50 mm in both directions when the surface is still tacky.
  - Allow 1<sup>st</sup> coat to dry for 24 hr.
  - Apply second coat of **ShaliUrethane<sup>®</sup> LM UV** @ 0.98 kg / m<sup>2</sup> by brush / roller / airless spray for final DFT of 1000 microns in two coats (theoretical coverage depending on surface conditions).
- **For 1.2 mm DFT**
  - Apply first coat of **ShaliUrethane<sup>®</sup> LM UV** @ 1.18 kg / m<sup>2</sup> by brush / roller while the primed surface is tacky. For faster and smoother application, airless spray is preferred.
  - Spread fiber glass net of 45 GSM with overlaps of 50 mm in both directions when the surface is still tacky.
  - Allow 1<sup>st</sup> coat to dry for 24 hr.
  - Apply second coat of **ShaliUrethane<sup>®</sup> LM UV** @ 1.18 kg / m<sup>2</sup> by brush / roller / airless spray for final DFT of 1200 microns in two coats (theoretical coverage depending on surface conditions).
- **For protection of ShaliUrethane LHM**
  - **ShaliUrethane<sup>®</sup> LM UV** can be applied as finish / protective top coat over ShaliUrethane<sup>®</sup> LHM @ 0.78 kg / m<sup>2</sup> to get 400 micron WFT which helps the durability of ShaliUrethane<sup>®</sup> LHM from UV over long period
  - Screeding is not recommended but if the screeding required, sprinkle sand @ 200 gm / m<sup>2</sup> over the final coating when the surface is still tacky
  - Ensure curing time of minimum 72 hrs before allowing / carrying out any foot traffic.
  - Extend waterproofing treatment up to 200 mm and terminate into groove on the parapet wall. Fill the groove with PMC mortar. Apply 15 mm plaster admixed with ShaliPlast LW + @ 200 ml / bag of cement for vertical protection.
  - For higher thickness, need to apply extra coat.

## Health & Safety

- Avoid contact with skin / eyes and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapor.
- 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 eye contact, wash immediately with plenty of clean water and seek medical advice.
- If swallowed seek medical attention immediately. Do not induce vomiting.

## Packing

Available in 25 kg packing consist of Component A 16 kg and Component B 9 kg.

## Storage

Keep in a cool and dry place within temperature of 4 °C to 27 °C.

## Shelf Life

12 months in original unopened sealed conditions.



### Product Range

- Waterproofing & Insulation
- Road Surfacing
- Sealants & Adhesives
- Pipeline Coatings
- Protective/Anti-Corrosion Coatings
- Epoxy and Flooring
- Grouts and Admixtures (GARA)
- RestoFix - Repair/Rehabilitation
- Other Construction Chemicals



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