

# ShaliUrethane<sup>®</sup> TC 100

Single Component Moisture Cure Aliphatic Polyurethane Top Coat



STP Limited  
Enhancing Structures' Life

## Description

**ShaliUrethane<sup>®</sup> TC 100** is a single component, moisture cured, polyurethane aliphatic top coat filled with special grade of fillers that offers superior bonding, flexibility and corrosive resistance to the substrate and gives excellent abrasion resistance.

## Characteristics - Physical

Colour	Grey	Density, gm / cc	1.25 ± 0.05
Application	Spray / Brush / Roller.	Sagging @ 100 micron	No
Cure time @ 24 °C, 60% RH		Theoretical coverage*, m <sup>2</sup> / L, 50 micron DFT	11 – 12
• Tack free time, hr	3 – 4	Recommended thickness, DFT, micron	50 - 100
• Recoat ability time, hr	8 – 10		
• Handle time, hr	24	Flash Point, °C	30
• Full cure, days	4 - 7		

\* Depending upon surface condition

## Characteristics - Technical

Property	Method	Result
Volume Solid, %	ASTM D 2369	60 ± 2
Spray, 5000 hr	ASTM B 117	Pass
Flexibility, %	ASTM D 522	> 90
Adhesion pull off on concrete, MPa	ASTM D 4541	> 2.5
Elasticity, %	ASTM D 412	> 150
Accelerated Weathering test	ASTM E D 4587	Passes
Shore A hardness	ASTM D 2240	55 - 60
Abrasion resistance, 1000 RPM, CS 17, 1 Kg load, gm	ASTM D 4060	0.15
Direct impact test	ASTM D 2794	150 kg-cm

## Application

- Apply as Exterior pipeline Coating.
- Structural steel, bridges, ballast tanks, storage tank, etc.
- Apply in Power, Oil and Gas sector including waste water treatment, chemical / fertilizer plants / Cooling tower.

## Advantages

- It is Compatible with most old coatings.
- Not required any Induction time.
- Material is High resistance to majority of chemicals and abrasion.

## Application Methodology

### ➤ Surface Preparation

- Remove all loose gravel, dirt, oil, grease or other loose foreign particles by sand blasting / iron brush / compressed air or water jet.
- In case of steel pipe / structure, prepare surface by mechanical grinding, shot blasting conforming to SA2½.
- Steel surface, in case of outdoor use, should be cleaned conforming to SA 2.
- In case of concrete surface, ensure that the surface is free of honey combs etc. Repair all honey combs fill with ready mix polymer mortar like ShaliFix FRM alternatively with PMC

- mortar prepared in the ratio of **ShaliCrete: Cement: Sand** (1:2: 5).
- Ensure that the surface is free of condensation / moisture before priming. Moisture should be 8 -10% tolerable.

#### ➤ **Material Preparation**

- Stir **ShaliUrethane® TC 100** by a slow speed mixture (approx. 400 rpm) 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.

#### ➤ **Application of Material**

- Prime surface with ShaliUrethane® MIO PU.
- Allow it to dry.
- Apply **ShaliUrethane® TC 100** on primed surface by single component airless spray gun / brush / roller.
- Allow it to dry for 8 – 10 hrs for subsequent coating.

### **Cleaning & Maintenance**

Clean all tools immediately after use with STP cleaner.

### **Health & Safety**

- Avoid contact with skin / eyes, and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapour.
- Wear suitable protective clothing, gloves and eye protection.
- In case of skin contact, 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 with plenty of clean water and seek medical advice.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

### **Packing**

Available in 20 L MS Drum,

### **Storage**

Store in a cool dry place, under shed, away from heat.

### **Shelf Life**

6 months from the date of manufacture when maintain in protected storage in original unopened sealed condition at 5 - 38 °C.



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#### **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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