

# ShaliPrime<sup>®</sup> MIO PU

Single Component Moisture Cure Polyurethane Primer



## Description

**ShaliPrime<sup>®</sup> MIO PU** is a single component, moisture cured, polyurethane primer filled with micaceous iron oxide and special grade of fillers.

**ShaliPrime<sup>®</sup> MIO PU** offers superior bonding and corrosion protection to steel / concrete surface.

## Characteristics – Physical

|                           |       |   |          |
|---------------------------|-------|---|----------|
| Colour                    | Red   | Flash point, °C   | 30       |
| Cure time @ 24 °C, 60% RH |       | Sagging @ 70 – 100 micron DFT                                 | No       |
| • Tack free time, hr      | 2 – 3 | Theoretical coverage* m <sup>2</sup> / L, 70 – 100 micron DFT | 6.5 - 10 |
| • Recoat ability time, hr | 5 – 6 | Recommended thickness, DFT, micron                            | 60 - 100 |
| • Handle time, hr         | 24    |   |          |
| • Full cure, days         | 4 - 7 |   |          |

\* Depending upon surface condition

## Characteristics - Technical

| Properties   | Method      | Result  |
|--|-------------|---------|
| Volume solid, %                                    | ASTM D 2369 | 65 ± 5  |
| Salt Spray, hr, passes                             | ASTM B 117  | 5000    |
| Flexibility, %                                     | ASTM D 522  | > 60    |
| Adhesion pull off test, MPa                        |             |         |
| • on Steel   | ASTM D 4541 | > 8     |
| • on Concrete                                      |             | >2.5    |
| Abrasion Resistance, 1000 RPM, CS 17, 1kg load, gm | ASTM D 4060 | 0.18    |
| Direct Impact Test, kg / cm                        | ASTM D 2794 | 60      |
| Elasticity, %                                      | ASTM D 412  | > 100   |
| Cathodic Disbondment, 28 days, 20 °C               | ASTM G 8    | 6 mm    |
| Surface Hardness, Shore A                          | ASTM D 2240 | 60 - 70 |

## Application

- Bridges, Ballast Tanks, Pipelines and other Steel Structures.
- Off-shore Platforms.
- Marine-port facilities.
- Power Plant, Refineries, Chemical Plant & Waste Water treatment plant.
- Material handling equipment.
- Cooling tower and other large concrete structures

## Advantages

- Tolerant to flush rusting.
- Compatible with most old coatings.
- No Induction time.
- Resistant to chemical, blistering, 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.
- Clean steel surface conforming to SA 2.
- In case of concrete surface, ensure that the surface is free of honey combs etc. Repair all honey combs by filling 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 less than 10% is tolerable.

### ➤ Material Preparation

- Stir **ShaliPrime® MIO PU** 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

- Apply ShaliPrime® MIO PU on primed surface by single component airless spray gun / brush / roller.
- Thinning, if required, may be done by STP Thinner.
- Allow it to dry for 8 – 10 hrs for subsequent coating.
- Ensure that the ambient temperature is not less than 5 °C.
- Apply in single or double coats over the surface as per requirement

## 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 in unopened sealed condition.



**STP Limited**  
*Enhancing Structures' Life*

### 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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