

ShaliPrime[®] MIO PU

Moisture Cure Polyurethane Primer



Description

ShaliPrime[®] MIO PU is a single component, moisture cured, polyurethane primer filled with micaceous iron oxide and special grade of fillers.

ShaliPrime[®] 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 ² / 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 and Insulation ■ Road Surfacing
- Sealants and Additives ■ Pipeline Coating
- Protective / Anti-Corrosive Coating ■ Epoxy Flooring
- Grouts / Admixtures ■ RestoFix- Repair / Rehabilitation
- Other Construction Chemicals



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