

ShaliPrime[®] Zn SI

2K Moisture Cured Zinc Silicate Primer



STP Limited

Description

ShaliPrime[®] Zn SI is a two component, moisture cured solvent based zinc rich ethylsilicate primer for protection of steel against severe corrosive environment.

ShaliPrime[®] Zn SI provides excellent cathodic protection to steel substrates and forms a tough abrasion resistant film.

It complies with IS: 14946-2001.

Characteristics - Physical

Colour	Grey	Finish	Matt
Mixing Ratio W/W (Binder : Powder)	2 : 3	Theoretical Coverage*, m ² / L, DFT, Micron	8 – 10 60 – 75 micron
Pot Life (30 °C, 50% RH), hrs	5 ± 1	Volume Solids, %	60 ± 3
pH	5 - 10	Salt Spray Test for 1000 hours at 75 microns DFT	Excellent
Specific Gravity (Mix)	2.17 ± 0.1		
Protection against corrosion under condition of condensation for 1000 hours at 75 Microns DFT	Excellent	Mud-cracking (when viewed under 10X magnification)	Satisfactory, The coating applied to a dry film thickness of 120 microns, shows no any mud cracking.
Dry Heat Resistance °C	Up to 400		
Application temperature °C	5 - 50	Surface temperature °C	3

* Depending upon surface condition.

Characteristics - Technical

Properties	Standard	Result
Flash Point, °C	IS:101 (part 1/Sec 6)	> 15
Drying Time, 27 °C, 60% RH	IS:101 (part 3/Sec 1)	15 minutes 2 hrs (min) 12 hrs (min)
Adhesion pull of, Mpa	ASTM D 4541	> 5

Application

- Steel structure, pipelines.
- Refineries, petrochemical units, power plants.
- Exterior and interior of storage tank, fertilizer units.
- Offshore and corrosive industrial environments.

Advantages

- Excellent water / solvent / abrasion resistance.
- Excellent salt spray resistance.
- Excellent weatherability.
- Very good alkali resistance.
- Good acid resistance.
- The coating attains water resistance within 30 minutes of application.

Application Methodology

➤ Surface preparation

- Remove dust, flakes, or other foreign particles by jet or dry air and clean the surface mechanically or by grinding to make it smooth before application as per Swedish Specification standard SIS-05-5900-1967.
- In case of new steel structure, blast clean to a minimum surface profile not exceeding 65 microns. Whereas in case of old steel structure, where blasting is not practical, use mechanical tools along with manual chipping and wire brushing to remove loose rust.
- Avoid excessive burnishing of steel.
- Thoroughly dust down the surfaces by hot air.

➤ Material Preparation

- Add Component B (Zinc) into Component A and thoroughly mix by using speed drill mixer with a spiral type blade at the bottom of stirrer rod at speed of 350 - 400 rpm, till homogeneous mix is obtained.
- After stirring, allow the mixture to mature for 10 minutes before application.

➤ Application of Material

- Apply through-
 - **Airless Spray** : Tip size 0.38 – 0.53 mm (approx. 15 – 21 thou). Tip pressure 1500 – 2300 psi (approx. 105 – 162 Kg / cm²).
 - **Air spray** : Tip size 2.0 – 3.0 mm. Tip pressure 40 – 60 psi (approx. 2.8 – 4.2 Kg / cm²).
 - **Brush** : Suitable for small area only.
 - **Thinner** : Apply preferably without thinning. Add up to 5% STP Thinner depending on conditions.
- Stir again before use and continuously during application.

Health & Safety

- The product should not come in contact with the skin and eyes or be swallowed.
- Ensure adequate ventilation and avoid inhalation of vapours as some people are sensitive to resins, hardeners and solvents.
- 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.

Packing

Available in 20 L (mixed paint)

Storage

Keep in cool and dry place in air tight container under shed away from heat.

Shelf Life

6 months in original 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)
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