ShaliPrime® Zn PE
2K Phenolic Epoxy Based Zinc Rich Primer

Description

ShaliPrime® Zn PE is a two component, cold cure, phenolic epoxy resin blend with zinc powder and Polyamide.

ShaliPrime® Zn PE provides a passive coating of metallic zinc which is a strong corrosion, wearing and weather resistant barrier layer.

ShaliPrime® Zn PE offers cathodic protection in case of any mechanical damage of coating.

It conforms to IS : 14589 : 1999.

Characteristics

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Method</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot Life, hrs at 30 °C, 100 grm</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Touch Dry Time, hrs</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Full Cure hrs</td>
<td></td>
<td>48 ± 2</td>
</tr>
<tr>
<td>Dry Film Thickness, Micron</td>
<td></td>
<td>70 ± 5</td>
</tr>
<tr>
<td>Appearance of cured Film Flat, Grey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theoretical Coverage, m²/L</td>
<td></td>
<td>6-7</td>
</tr>
<tr>
<td>Specific gravity</td>
<td></td>
<td>1.5 ± 0.02</td>
</tr>
<tr>
<td>Application Temperature, °C</td>
<td></td>
<td>&gt; 10 to &lt; 50</td>
</tr>
</tbody>
</table>

* Depending upon surface condition

Technical Characteristics

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Method</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength, MPa</td>
<td>ASTM D 2370-73</td>
<td>17 ± 2</td>
</tr>
<tr>
<td>Elongation %</td>
<td>ASTM D 2370-73</td>
<td>&gt; 5</td>
</tr>
<tr>
<td>Water Vapor Transmission, mg / cm² / mm / 24 hrs</td>
<td>ASTM D 1653-74</td>
<td>0.12</td>
</tr>
<tr>
<td>Pull Off Adhesion, MPa, on steel surface</td>
<td>ASTM D 4541</td>
<td>&gt; 3</td>
</tr>
</tbody>
</table>

Application

- Anti-corrosive primer for steel surfaces.
- Anti-corrosive primer for reinforcement steels.
- Online coating of containers.

Advantages

- Excellent long-term protection of steel.
- Easy to use and apply at the job site.
- Acrylic / epoxy / urethane may be used as topcoats.
- Long pot life for optimum working time.
- Repair of Galvanized steel.

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.
- In case of new steel structure, blast clean to a minimum surface profile not exceeding 65 microns. 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.
Material Preparation

- Stir Component A (Resin) and Component B (Hardener) separately with a hand drill type spiral stirrer. This is to ensure homogeneous dispersion of all fillers, which might have settled in the can. If settling is observed in the Component A, loosen the settled material with the help of hand stirrer followed by power driven stirrer for quick homogenous mixing.
- Gradually add the entire contents of thoroughly stirred Component B to Component A and mix thoroughly for 3 minutes using a slow speed drill (400 - 500 rpm) fitted with a suitable mixing paddle until homogeneous mix is achieved.
- Carry out mixing in a specially designed drum mixer or in a bucket using drill mixer fitted with paddle.

Application of Material

- Apply ShaliPrime® Zn PE on prepared surface @ 6 - 7 m² / L by brush / roller / airless spray.
- Allow it to dry for 1 hr.
- Install ShaliPrime® Zn PE by spreading evenly over the recommended area.
- Do not apply ShaliPrime® Zn PE in more than 50 microns DFT in a single coat.
- Apply second coat of ShaliPrime® Zn PE after one hr of first coat.
- ShaliPrime® Zn PE may be over coated with conventional paints or two-pack epoxy paints / Polyurethane paints. Over-coating can be done after 6 - 8 hrs; however, it is recommended to coat after 12 - 24 hrs of application of primer to obtain superior performance.
- For airless spray application, use nozzle no 327 and filter mesh size 30 with tip pressure 110 – 160 kg / m².
- Brush and spray equipment should be cleaned with epoxy thinner

Cleaning & Maintenance

- Clean all tools / brush / spray equipment immediately after use with epoxy thinner.

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 contact with eyes, wash immediately with plenty of clean water and seek medical advice.
- If swallowed seek medical attention immediately. Do not induce vomiting.

Packing

Available in 15 L container consist of Component A 12 L and Component B 3 L.

Storage

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

Shelf Life

12 months in original unopened sealed condition.