ShaliPrime® Zn R

Description
ShaliPrime® Zn R is a two component, cold cure, epoxy resin blend with zinc powder. Unlike regular paints / epoxies, which resists corrosion by forming and impermeable barrier between the metal and atmospheric moisture, ShaliPrime® Zn R provides corrosion protection through tiny electrical cathodic cells formed by interaction of zinc with steel surface. Of course, ShaliPrime® Zn R provides some impermeable barrier as well. ShaliPrime® Zn R is superior to paints / epoxies in providing corrosion protection.

It conforms to IS : 14589 : 1999.

Characteristics

<table>
<thead>
<tr>
<th>Pot Life, hrs</th>
<th>3 – 6</th>
<th>Specific Gravity</th>
<th>1.50 ± 0.02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Time, hrs</td>
<td>1.50</td>
<td>Theoretical Coverage, m²/L *</td>
<td>5 – 6</td>
</tr>
<tr>
<td>Dry Film Thickness</td>
<td>35 microns</td>
<td>Minimum Application Temperature</td>
<td>&gt; 10 °C &lt; 50 °C</td>
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</tbody>
</table>

* Depending upon surface condition.

Application

- Anti-corrosive primer for steel surfaces.
- Anti-corrosive primer for reinforcement steels.

Advantages

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

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 dispersal 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 homogenous 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 the homogenous two component thoroughly stirred mixture to the cleaned, evened and bone dry surface @ 5-6 m²/L. Lay the mix on bone dry surface at temperatures ranging between 10°C to 50°C using a brush or roller.
- Install ShaliPrime® Zn R by spreading evenly over the recommended area.
- Avoid excess application and mixing. Do not apply ShaliPrime® Zn R in more than 50 microns DFT in a single coat.
- Apply second coat of ShaliPrime® Zn R on bone dry first coat.
- ShaliPrime® Zn R 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 equipments immediately after use with epoxy thinner.

Health & Safety

- Use mask, nose cover and hand gloves during application.
- Clean hands with soap water after application.
- Ensure adequate ventilation and avoid inhalation of vapours as some people are sensitive to resins, hardeners and solvents.
- Avoid contact with skin / eyes. In case of unlikely contact with eyes, rinse immediately with plenty of clean water, then cleanse with soap and lukewarm water and seek medical advice. Do not use solvent to clean the contacted area.
- Prevent swallowing. In case of unlikely swallowing, seek medical attention immediately. Do not induce vomiting.

Packing

Available in 15 L container.

Storage

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

Shelf Life

12 months in original unopened sealed condition.