ShaliProtek® 2E AL
2K Hi-Build Protective Epoxy Aluminium Finish Coating

Description

ShaliProtek® 2E AL is a two-component, cold cure epoxy aluminium-based coating, filled with special type of aluminium pigment to protect steel, concrete structures and other construction materials in corrosive environment.

ShaliProtek® 2E AL is a high build paint used as top coat and has excellent resistance to abrasion, sea water and various oil.

Characteristics

<table>
<thead>
<tr>
<th>Application</th>
<th>Brush / Roller / Spray</th>
<th>Solid Content, %, by volume</th>
<th>75 ± 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Silver Finish</td>
<td>Flash point, °C</td>
<td>&gt;30</td>
</tr>
<tr>
<td>Theoretical coverage*, m2 / L</td>
<td>3.5 - 5</td>
<td>Mixing ratio</td>
<td>2 : 1</td>
</tr>
<tr>
<td>High temperature resistance, (Dry) OC</td>
<td></td>
<td>Low temperature resistance, OC</td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td>70 – 80</td>
<td>Continuous</td>
<td>-5</td>
</tr>
<tr>
<td>Occasional</td>
<td>90</td>
<td>Occasional</td>
<td>-15</td>
</tr>
<tr>
<td>Drying time, 30 OC</td>
<td></td>
<td>Application temperature, °C</td>
<td></td>
</tr>
<tr>
<td>Touch dry, minutes</td>
<td>45</td>
<td>Minimum</td>
<td>10</td>
</tr>
<tr>
<td>Hard Dry, hrs</td>
<td>7 – 8</td>
<td>Maximum</td>
<td>40</td>
</tr>
<tr>
<td>Full Cure, days</td>
<td>7</td>
<td>Specific Gravity, 30 °C</td>
<td>1.40 ± 0.05</td>
</tr>
<tr>
<td>Overcoat, hrs</td>
<td>12 - 72</td>
<td>Pot life, hrs, 30 °C</td>
<td>1</td>
</tr>
<tr>
<td>Recommended DFT, Micron</td>
<td>150 - 200</td>
<td>Salt spray, 300 hrs, @ 150 Micron DFT</td>
<td>Pass</td>
</tr>
<tr>
<td>Adhesion to Steel, MPa</td>
<td>&gt; 6</td>
<td>Hardness Shore D</td>
<td>65 ± 5</td>
</tr>
<tr>
<td>Chemical resistant</td>
<td>Good</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Depending upon Surface Condition.

Application

- Metal & Steel structure.
- Water ballast tank.
- Sheet & pipe piling.
- Dams, Barrage gates, Penstocks.
- Crude oil storage tanks.
- Concrete and Steel surfaces.
- Railway/any type of bridges.

Advantages

- Anti-corrosive coating for structures – MS or concrete – even where the structure is in continuous contact with water.
- Provides excellent resistance to impact, thermal shock and abrasion.
- Cures to a hard, smooth and flexible surface with excellent resistance to sea / salt water, oil, acids, alkalis, crude oil and minerals.

Application Methodology

➢ Surface Preparation

- Remove dust, flakes, oil, grease or other foreign particles by jet or dry air and clean the surface to make it smooth before applying ShaliProtek® 2E AL.
Surface of steel must be prepared as per the NACE or SSPC guidelines to achieve preferably a profile of Sa 2½ (ISO 8501-1: 2007).

Ensure that new concrete must be at least 28 days old.

**Material Preparation**

- Add whole of Component B into Component A, which are pre-weighted and mix thoroughly for 5 minutes until homogenous mix is achieved. Use slow speed drill fitted with a suitable mixing paddle.
- Allow the combined mix for an induction time of 5 minutes to ensure escape of entrapped air.
- Stir again gently with a hand stirrer to ensure uniformity before application.

**Application of Material**

- Prime the surface with ShaliPrime® Zn Ph 60 over metal surface whereas ShaliPrime® 2E in case of concrete surface
- Allow it to dry.
- Allow it to touch dry condition.
- Apply ShaliProtek® 2E AL by brush / roller / spray on the primed surface.
- Allow it to dry for 2 – 3 hrs
- Apply second coat of ShaliProtek® 2E AL after 12 hrs, if required to get higher DFT.
- In case of airless spray, use standard equipment having tip size of 0.59 – 0.89 mm and tip pressure 210 - 250 kg / cm².

**Cleaning & Maintenance**

- Clean all tools immediately after use with STP Thinner. Do not allow the material to harden.

**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 combo pack of 15 L consisting of 10 L Comp A and 5 L Comp B.

**Storage**

Keep in cool and dry place, under shed, away from heat.

**Shelf Life**

12 Months in original unopened sealed condition.