ShaliProtek® 2AC PU TC 50
2K Aliphatic Acrylic PU Solar Reflective, UV Resistant Top Coat

Description
ShaliProtek® 2AC PU TC 50 is two components, elastomeric, liquid, aliphatic, Acrylic Polyurethane based UV resistant gloss, transparent / pigmented, tough and yet flexible, high solar reflective coating.

It conforms to IS : 17218 : 2019.

Characteristics – Physical

<table>
<thead>
<tr>
<th>Finish</th>
<th>Glossy</th>
<th>Application temperature, °C</th>
<th>Drying time, @ 30 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point, °C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base</td>
<td>&gt; 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardener</td>
<td>&gt; 150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volume solid, %</td>
<td>52 ± 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recoating time, hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td>48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recommended DFT, micron</td>
<td>125 ± 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature resistance, °C,</td>
<td>&gt; 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mix density, g / cc</td>
<td>1.25 ± 0.10</td>
<td></td>
<td>Solar Reflectance Index</td>
</tr>
</tbody>
</table>

Characteristics – Technical

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact resistance, (kg – cm)</td>
<td>ASTM D 2794</td>
<td>60</td>
</tr>
<tr>
<td>Abrasion resistance, mg</td>
<td>ASTM D 4060</td>
<td>&lt; 80</td>
</tr>
<tr>
<td>UV resistance(QUV), 2000 hrs</td>
<td>ASTM G 154</td>
<td>Pass</td>
</tr>
</tbody>
</table>

Application
- Protection of heritage structure and statue.
- Extensive use in coastal and chemical environment.
- Power / Oil / Gas Plants / Marine.
- Offshore structures.
- Petrochemical / Pharmaceutical.
- Chemical Plants.
- Cement / Steel plants / infrastructure projects.
- Rail coach and chemical wagon exteriors.

Advantages
- Resistant to
  - UV and weather.
  - High Impact and abrasion.
  - Industrial corrosive environment
- Better adhesion and flexibility.
- Direct to metal application.
Application Methodology

➢ Surface Preparation

Concrete Surface
• Prepare the surface by mechanical grinding or other suitable method.
• Remove dust, flakes, oil, grease or other loose foreign particles by sand blasting, iron brush or compressed air. Remove old painting using surface grinder.
• For best bond, ensure that concrete surface is textured.
• In case of new concrete, ensure that concrete is cured at least 28 days and moisture content is below 5%.
• Apply ShaliPrime PUM on the concrete surface
• Allow it to dry before application of ShaliProtek® 2AC PU TC 50.

Metal Surface
• Remove all loose mill scale, oil, grease by wire brush and solvent.
• Blast the surface to Sa 2 or 2.5 depending on the severity of the condition
• Apply ShaliPrime ERO or ShaliPrime Zn Ph (Optional), can be applied on direct to metal surface.

➢ Material Preparation

• Stir entire Component A (Resin) thoroughly till homogenous mix is obtained by using speed drill mixer with a special type blade at the bottom of stirrer rod.
• Add entire Component B (Hardener) into Component A. Both Component A & B comes in factory pre-weighted quantity in the ratio of 9 : 1 by volume.
• Stir the mix for two minutes.
• After stirring wait for 2 - 3 minutes to ensure escape of entrapped air.

➢ Application of Material

• Prime the surface in case of concrete with ShaliPrime PUM and in case of metal (optional) with ShaliPrime E.
• Allow it to dry for 6 – 8 hrs till it is touch dry.
• Apply ShaliProtek® 2E PU TC 50 by brush / roller / spray on the primed surface.

<table>
<thead>
<tr>
<th>Application</th>
<th>Conventional Spray</th>
<th>Airless Spray</th>
<th>Brush / Roller</th>
</tr>
</thead>
<tbody>
<tr>
<td>STP Thinner, %</td>
<td>5 - 15</td>
<td>1 – 2 max</td>
<td>2 - 5</td>
</tr>
<tr>
<td>Nozzle Orifice, Thou, minimum</td>
<td>1.2 – 1.4</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>Nozzle Pressure, Psi</td>
<td>40 - 70</td>
<td>2200 - 2500</td>
<td></td>
</tr>
</tbody>
</table>

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, consisting of Component A 18 L and Component B 2 L.
**Storage**

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

**Shelf Life**

12 months in original unopened sealed condition.