ShaliProtek® 2AC PU TC
2K Isocyanate Cured Aliphatic Acrylic PU UV Resistant Finish Coat

Description
ShaliProtek® 2AC PU TC is two components liquid aliphatic Acrylic Polyurethane based UV resistant gloss coating.

ShaliProtek® 2AC PU TC gives tough, flexible and solvent and mild chemical resistant coating.

ShaliProtek® 2AC PU TC is available in transparent as well as various colours.

Characteristics – Physical

<table>
<thead>
<tr>
<th>Finish</th>
<th>Glossy</th>
<th>Application Temp, °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>Touch dry, hrs</td>
</tr>
<tr>
<td>• Hardener</td>
<td>&gt; 150</td>
<td></td>
<td>Hard Dry, days</td>
</tr>
<tr>
<td>Recoeating Time, hrs</td>
<td>8 ± 1</td>
<td>Pot Life, 30 °C, hrs</td>
<td>4 - 5</td>
</tr>
<tr>
<td>• Minimum</td>
<td>&gt;120</td>
<td>Theoretical Coverage*, m² / L</td>
<td>13-15</td>
</tr>
<tr>
<td>• Maximum</td>
<td>48</td>
<td>Adhesion pull off, Mpa</td>
<td>4 - 5</td>
</tr>
<tr>
<td>Recommended DFT, Microns</td>
<td>30 - 40</td>
<td>Mixing Ratio (v/v)</td>
<td>9 : 1</td>
</tr>
<tr>
<td>Temperature resistance, °C (Dry)</td>
<td></td>
<td>Hardness, Shore A, after 7</td>
<td>60 ± 5</td>
</tr>
<tr>
<td>Mix Density, g/cc</td>
<td>1.20 ± 0.05</td>
<td>Gloss @ 60°, %</td>
<td>&gt;80</td>
</tr>
</tbody>
</table>

* Depending upon surface condition.

Characteristics – Technical

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume Solids, %</td>
<td>ASTM D 2697-03</td>
<td>55 ± 2</td>
</tr>
<tr>
<td>Impact resistance, (kg - inch)</td>
<td>ASTM D 2794</td>
<td>150</td>
</tr>
<tr>
<td>Abrasion resistance, mg</td>
<td>ASTM D 4060</td>
<td>&lt; 80</td>
</tr>
<tr>
<td>Weathering resistance, % (after minimum 1000 hrs exposure), Colour change</td>
<td>ASTM D 4587</td>
<td>Gloss loss &lt; 25</td>
</tr>
<tr>
<td></td>
<td>ASTM D 2244</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASTM D 523  Level 2</td>
<td>&lt; 2 Δ E</td>
</tr>
</tbody>
</table>

Application
- Protection of heritage structure and statue.
- Extensive use in coastal and chemical environment.
- Power / Oil / Gas Plants / Offshore structures.
- Petrochemical / Pharmaceutical / Chemical Plants.
- Cement / Steel plants,
- Infrastructure projects.
- Marine structures.
- 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.
  - Remove old painting using surface grinder.
  - For best bond, concrete surface must be slightly textured.
  - Ensure that concrete must be cured at least 28 days and moisture content is below 5%.

- **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

➢ **Material Preparation**

- Stir entire Component A thoroughly by using speed drill mixer with a spiral type blade at the bottom of stirrer rod. The speed may be 300 - 400 rpm till homogeneous mix is obtained.
- Add entire Component B in Component A. Both Component A & B comes in factory pre-weighed quantity in the ratios of 9 : 1 by volume.
- After stirring, wait for 5 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 2E.
- Allow it to dry for 6 – 8 hrs till it is touch dry.
- Apply ShaliProtek®2AC PU TC by brush / roller / spray to the primed surface.

<table>
<thead>
<tr>
<th>Application</th>
<th>Conventional Spray Thinner, %</th>
<th>Airless Spray Nozzle Orifice, Thou, minimum</th>
<th>Brush / Roller Nozzle Pressure, Psi</th>
<th>Recommended DFT, Minimum, micron</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 - 15</td>
<td>1 – 2 max</td>
<td>2 - 5</td>
<td>2200 - 2500</td>
</tr>
<tr>
<td></td>
<td>1.2 – 1.4</td>
<td>0.58</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>40 - 70</td>
<td>2200 - 2500</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cleaning**

- Clean all tools immediately after use with **STP Thinner**. Do not allow 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 4 L and 20 L pack.

**Storage**

Store in a cool dry place, under shed, away from heat.
Shelf Life
12 months in original unopened sealed conditions.