ShaliProtek® PU HA
Water Based Elastomeric High Abrasion PU Top Coat

Description

ShaliProtek® PU HA is a single component, water based, high abrasion, UV resistant, weather-stable cold applied, pigmented elastomeric polyurethane top coat for protection over water / solvent-based liquid as well as preformed waterproofing membrane.

ShaliProtek® PU HA can also be used on the concrete surface for waterproofing.

ShaliProtek® PU HA forms a seamless, monolithic, hydrophobic polyurethane coating, which, being tough as well as flexible, adheres to the base-membrane efficiently and protect it for long-term.

Characteristics - Physical

<table>
<thead>
<tr>
<th>Color</th>
<th>White</th>
<th>Touch Drying time, minutes</th>
<th>30 - 45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid content, %</td>
<td>&gt; 60</td>
<td>Full cure time, days</td>
<td>7</td>
</tr>
<tr>
<td>Service temp. range, °C</td>
<td>0 to 50</td>
<td>UV stability</td>
<td>Excellent</td>
</tr>
<tr>
<td>Theoretical Coverage *, 200 Micron DFT, Kg / m²</td>
<td>0.5</td>
<td>VOC Content, gm / kg</td>
<td>Nil</td>
</tr>
<tr>
<td>Specific gravity @ 30 °C</td>
<td>1.33 ± 0.03</td>
<td>pH</td>
<td>Alkaline</td>
</tr>
<tr>
<td>Application Temperature, °C</td>
<td>&gt; 5</td>
<td>Viscosity @ 30 OC, cps</td>
<td>4000 ± 500</td>
</tr>
</tbody>
</table>

* Depending upon surface condition  # Depends upon weather condition.

Characteristics - Technical

<table>
<thead>
<tr>
<th>Elongation, %</th>
<th>ASTM D 2370</th>
<th>600 ± 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile strength, MPa</td>
<td>ASTM D 2370</td>
<td>2.0 ± 0.2</td>
</tr>
<tr>
<td>Adhesion to primed concrete, Pull off strength, MPa</td>
<td>ASTM D 4541</td>
<td>2.0 ± 0.2</td>
</tr>
<tr>
<td>Crack bridging at low temperature</td>
<td>ASTM C 836</td>
<td>No cracking</td>
</tr>
<tr>
<td>Water Absorption %</td>
<td>IS 13826 Part 3</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Hardness Shore A</td>
<td>ASTM D 2240</td>
<td>&gt; 55</td>
</tr>
<tr>
<td>Elastic Recovery @ 150% elongation, %</td>
<td></td>
<td>88 ± 3</td>
</tr>
<tr>
<td>Abrasion Resistance (Taber Abrader), mg / 1000 cycles</td>
<td>ASTM D 4060</td>
<td>35</td>
</tr>
<tr>
<td>Tear Resistance, N/mm</td>
<td>ASTM D 412</td>
<td>20</td>
</tr>
<tr>
<td>Water vapor permeability, gr/m²/day</td>
<td>ISO 9932:91</td>
<td>5</td>
</tr>
<tr>
<td>Resistance to Water Pressure, 1 m water column 24 Hr</td>
<td>DIN EN 1928</td>
<td>No leak</td>
</tr>
</tbody>
</table>

Application

- As top coat over newly laid liquid waterproofing system.
- As top coat over existing Waterproofing membranes.

Advantages

- Avoids protection through screed thus saving considerable load on roof.
- Tough / flexible / Hydrophobic.
- High abrasion resistance.
- Monolithic / seamless Membrane.
- Excellent adhesion to any membrane
- Simple application (Brush / Roller).
- Withstands normal foot traffic movement.
Application Methodology

➢ **Surface Preparation**
- Surface need to be clean, dry and free of any contaminations which may adversely affect the adhesion of the coating.
- Remove all loose gravel, dirt, oil, grease and foreign matter by jet of dry air.
- Ensure that the moisture content in the prepared surface does not exceed 5%.

➢ **Material Preparation**
- Stir ShaliProtek® PU HA by a slow speed mixture (approx. 400 rpm) fitted with a suitable mixing paddle to ensure a homogenous mix.
- After stirring, wait for the product to settle in order to let entrapped air escape.

➢ **Top Coat Application**
- Prime the surface with ShaliPrime BTD / ShaliPrime WB and apply @ 400 grm / m² for better aesthetic look.
- Allow the primed surface to touch dry.
- Apply ShaliProtek® PU HA by brush / roller / airless spray on the primed surface in single or multiple layers.
- Allow 3-4 hours to cure in between the two layers.

➢ **Waterproofing Application**
- For application on the bare concrete surface as waterproofing membrane, first clean the surface mechanically or by grinding, and then remove loose particles to make it smooth before application.
- Prime the surface as stated above.
- Apply ShaliProtek® PU HA in multiple coats to achieve 200-micron DFT.

**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 kg pack.

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

**Shelf Life**
12 months in original unopened sealed condition.

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**Product Range**
- Waterproofing & Insulation
- Road Surfacing
- Sealants & Adhesives
- Pipeline Coatings
- Protective/Anti-Corrosion Coatings
- Epoxy and Flooring
- Grouts and Admixtures (GARA)
- RestoFix - Repair/Rehabilitation
- Other Construction Chemicals

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