HIND HYDRO FLEX PU 300

PRODUCT DATA SHEET
TWO COMPONENT SOLVENT FREE LIQUID APPLIED POLYURETHANE WATERPROOFING MEMBRANE

DESCRIPTION

Hind HydroFlex PU 300 is two component, liquid applied, solvent free hard-elastic, cold applied and cold curing polyurethane membrane specially formulated for long lasting waterproofing and protection. It gets cured by cross-linking reaction between the two components.

USES

Hind HydroFlex PU 300 is used for Waterproofing of Drinking water Supply channels, water pipes, drinking water tanks & reservoirs, odorless waterproofing of Wet Areas (under tiles) in bathrooms , swimming pools Kitchens, roof waterproofing etc. It can also be used for waterproofing of surfaces which comes into direct contact with potable (drinking) and saline water. It is effective for application on concrete surface in saline atmosphere.

ADVANTAGES

- Economical Cost and certified to be used for potable (drinking) water reservoirs.
- Seamless membrane formed on application without joints and 100% waterproofing ensured.
- Excellent adherence to almost all surface.
- Frost & Water resistant.
- Mechanical properties are intact over a temperature ranging between -30°C to 90°C.
- Maintains its elastic properties at low (frost) temperature.
- Trafficable on waterproofed surface done with Hind HydroFlex PU 300.

APPLICATION

Surface Preparation

Surface over which the coating is to be applied should be structurally sound, clean, dry, free from loose particles, oil, laitance and other containments and is very much essential for optimum finish and durability.

The moisture content of the surface over which Hind HydroFlex PU 300 is to be applied should not exceed 5%. The compressive strength of the substrate should be minimum of 25Mpa , and cohesive bond strength at least 1.5 Mpa. New concrete structures to be allowed to gain full compressive strength and dried for 28 days. Undulation and surface irregularities need to be smoothened by grinding process. Grinding dust and loose particles to be removed completely before application of the coating. It should always be ensured that the surface should not be washed with water , compressed air blowing process to be followed for cleaning.

Priming

Over the prepared Concrete/Steel , cement screed and ceramic tiles, a coat of Hind ERS 21 P (250-300 gms/ m²) to be applied as a primer coat by brush, to make the surface smooth and also to achieve perfect bonding of the coating with the surface. 12 hours times is required for complete curing of the primed surface.

Mixing

Component A of Hind Hydroflex PU 300 to be stirred properly and then added to Component B at the stipulated mixing ratio and mixed with a low speed mechanical stirrer for 3-5 mins. The mixing to be done very thoroughly and uniformly so that the mixture becomes fully homogenous before application.
The mixture is now poured onto the primer and prepared surface and laid by means of a squeegee, roller or brush to cover up the entire surface. It should be ensured that consumption of the mixed material is completed within the pot life (~ 30mins). The mixed material should not be left in the pail for a long time because exothermic reaction accelerates the curing time and shortens the pot life of the mixed material. It is advisable that after mixing the material is to be poured directly on the surface or transferred into smaller pail to minimize the exothermic reaction. Hind Fiber Glass cloth may be used as reinforcement at problem areas like wall and floor junction, pipe-outlets, water spouts (siphon) etc. For proper fixing of the fiber glass cloth, it is to be sandwiched between two coats.

After an interval of 12-18 hours and not later than 48 hours the second coat is to be applied. Application of third coating to be done if situation demands or specification suggest for building up required thickness.

**PHYSICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Product Composition</th>
<th>Polyurethane Resin &amp; Hardener</th>
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</thead>
<tbody>
<tr>
<td>Mixing Ratio</td>
<td>A: B = 6:1 parts by weight</td>
</tr>
<tr>
<td>Resistance to water pressure (DIN EN 1928)</td>
<td>No Leakage (1 m water column, 24 h)</td>
</tr>
<tr>
<td>Solid Content (Calculated)</td>
<td>100%</td>
</tr>
<tr>
<td>Tensile Strength (ASTM D 638)</td>
<td>&gt; 7.0 N/mm²</td>
</tr>
<tr>
<td>Elongation at break (ASTM D 412)</td>
<td>&gt; 100%</td>
</tr>
<tr>
<td>Hardness (Shore A Scale) (ASTM D 2240)</td>
<td>70 ± 5</td>
</tr>
<tr>
<td>Adhesion to Concrete (ASTM D 903)</td>
<td>&gt; 2.0 N/mm²</td>
</tr>
<tr>
<td>UV accelerated ageing in presence of moisture</td>
<td>Passed – No significant changes (EOTA TR-010)</td>
</tr>
<tr>
<td>Hydrolysis (5% KOH, 7 days cycle)</td>
<td>No significant elastomeric changes</td>
</tr>
<tr>
<td>Service Temperature</td>
<td>-30°C to 90°C</td>
</tr>
<tr>
<td>Tack free time</td>
<td>6-8 hours Conditions 20°C, 50% RH</td>
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<tr>
<td>Light trafficking time</td>
<td>24 hours Conditions 20°C, 50% RH</td>
</tr>
<tr>
<td>Final Curing time (Ponding Test)</td>
<td>7 days Conditions 20°C, 50% RH</td>
</tr>
<tr>
<td>Chemical Resistance Properties</td>
<td>Good resistance against acidic and alkali solutions (5%), detergents, seawater (saline conditions) and oils.</td>
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</table>

**PACKING**

Hind HydroFlex PU 300 (A +B) is available in 6 + 1 Kg. pails.

**COVERAGE**

1.2 - 1.5 Kg per m² applied in three layers. The coverage is depended on surface porosity, temperature, relative humidity, application method and finish required.

**STORAGE**

9 months in original unopened container. Do not expose or open container to high humidity conditions and stored in a cool and dryplace.

**HANDLING PRECAUTION**

Hind HydroFlex PU 300 is non-toxic but ingestion is to be avoided. Any splashes to the skin must be washed with water. If contact with eyes occurs, wash well immediately with water and seek medical advice.

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Note:
- Hindcon Chemicals maintains a team of technically trained professionals to provide full support to your problems in construction, and recommend the correct product to suit your specific requirements. Our authorized applicators can attend your site for application of the products.
- The content of the Technical datasheet are for general information and guideline. The results shown here are generated from our laboratory or from our site experiences.
- Qualities of our products are maintained as per ISO9001:2008 recommendations and continuous researches. The behavior can change as per the prevailing conditions at the time of applications.
- Since HINDCON CHEMICALS LIMITED has no control over the use to which the users may put the material, it does not claim or warrant that in the user’s particular circumstances, the result that the user will obtain from the product will be the same as those described in this communication or that the user will find the information or recommendations complete, accurate or useful. The client must test and ascertain the safety and fitness for the product for use.

HINDCON CHEMICALS LIMITED  
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