HYPERDESMO®-ADY-E

One-component, semi-glossy, aliphatic, elastic polyurethane Top Coat.

DESCRIPTION
HYPERDESMO®-ADY-E is a one-component polyurethane coating, which contains specialty inorganic fillers that upon combination with small amount (5-10%) of ALCHIMICA pigment paste offer superior hiding power. This allows minimal consumption of material and omitting of a second coat (in cases of simple UV protection, not traffic resistance) resulting in overall cost reduction. The material is based on the very successful product HYPERDESMO®-ADY-E (transparent) so it has similar elastomeric properties with HYPERDESMO® products. It is based on pure elastomeric hydrophobic polyurethane resin, which results in excellent mechanical, chemical, thermal, UV and natural element resistance properties.

Apply with brush, roller or airless spraying in one or two coats. Minimum consumption per coat: 0.200 kg/m².

COMPLIANCE - CERTIFICATION
HYPERDESMO®-ADY-E is CE certified as part of the HYPERDESMO® System, offering increased UV resistance and colour protection.

FEATURES & BENEFITS
- excellent hiding power even in one coat
- traffic resistant
- strong and uniform adhesion on almost any type of surface,
- highly hydrophobic,
- highly durable when exposed to the natural elements, maintains its elasticity even down to -40 °C,
- excellent heat and ultraviolet/UV resistance, it will not yellow, peel or soften up to 90 °C,
- outstanding resistance to chemicals and mechanical stresses (high tensile strength and abrasion resistance),
- compatible pigment pastes available in many colours.

APPLICATION PROCEDURE
Clean the surface using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes, etc. must be removed. Further primer information available on request. The application surface must be dry.

When used as a topcoat, for colour protection of HYPERDESMO® products, it is either pre-pigmented from the factory in white/grey colour or it comes in NEUTRAL version that must be pigmented with ALCHIMICA®’s pigment pastes only (10% max). It must be applied WITHIN 24-72 hours of HYPERDESMO® depending on weather conditions.

Preparation:
When stirring (or pigmenting) take care not to introduce air in the fluid, which may result in...

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HYPERDESMO®-ADY-E

bubbling on the cured membrane. Stirring can either be done manually or with a low speed (300 rpm) mixer. A small sediment may form in the pail after prolonged storage. This can be homogenized in the product with mechanical mixing.

Application:
Mix with ALCHIMICA pigment paste 5-10% or as required. ALCHIMICA guarantees product performance only when used with ALCHIMICA pigment pastes. Avoid outsourcing of pigment pastes as may contain chemicals that will inhibit material curing. Apply with brush, roller or airless spraying in one or two coats. Do not exceed 48 hours between coats.

CONSUMPTION
0.2-0.6 kg/m² in one or two coats, depending on traffic conditions.

TECHNICAL SPECIFICATIONS

In liquid form (before application):

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>UNITS</th>
<th>METHOD</th>
<th>SPECIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity (Brookfield)</td>
<td>cP</td>
<td>ASTM D2196-86, @ 25 °C</td>
<td>300-600</td>
</tr>
<tr>
<td>Specific weight</td>
<td>gr/cm³</td>
<td>ASTM D1475 / DIN 53217 / ISO 2811, @ 20 °C</td>
<td>1.15-1.25</td>
</tr>
<tr>
<td>Tack free time, @ 77 °F (25 °C) &amp; 55% RH</td>
<td>hours</td>
<td>-</td>
<td>6-8</td>
</tr>
<tr>
<td>Recoat time</td>
<td>hours</td>
<td>-</td>
<td>24</td>
</tr>
</tbody>
</table>

CLEANING
Clean tools and equipment first with paper towels and then using SOLVENT-01. Rollers will not be re-usable.

PACKAGING
5 Kg, 20 Kg

SHELF LIFE
Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25 °C. Once opened, use as soon as possible.

SAFETY INFORMATION
Contains volatile flammable solvents. Apply in well-ventilated, no smoking areas, away from naked flames. In closed spaces use ventilators and carbon active masks. Keep in mind that solvents are heavier than air so they creep on the floor. The MSDS (Material Safety Data Sheet) is available on request.

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**HYPERDESMO®-ADY-E**

The cured membrane:

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>UNITS</th>
<th>METHOD</th>
<th>SPECIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service temperature</td>
<td>°C</td>
<td>-</td>
<td>-40 to 90</td>
</tr>
<tr>
<td>Max. temperature short time (shock)</td>
<td>°C</td>
<td>-</td>
<td>200</td>
</tr>
<tr>
<td>Hardness</td>
<td>Shore D</td>
<td>ASTM D2240 / DIN 53505 / ISO R868</td>
<td>40</td>
</tr>
<tr>
<td>Tensile strength at break @ 23 °C</td>
<td>Kg/cm² (N/mm²)</td>
<td>ASTM D412 / EN-ISO-527-3</td>
<td>400 (40)</td>
</tr>
<tr>
<td>Percent elongation @ 23 °C</td>
<td>%</td>
<td>ASTM D412 / EN-ISO-527-3</td>
<td>&gt; 300</td>
</tr>
<tr>
<td>Water vapor transmission</td>
<td>gr/m².hr</td>
<td>ASTM E96 (Water Method)</td>
<td>0.8</td>
</tr>
<tr>
<td>Thermal resistance (100 days @ 80 °C)</td>
<td></td>
<td>EOTA TR011</td>
<td>passed</td>
</tr>
<tr>
<td>QUV Accelerated Weathering Test (4hr UV, @ 60 °C (UVB-Lamps) &amp; 4hr COND @ 50 °C)</td>
<td></td>
<td>ASTM G53</td>
<td>passed (2000 hours)</td>
</tr>
<tr>
<td>Hydrolysis (Potassium Hydroxide 8%, 10 days @ 50 °C)</td>
<td></td>
<td>-</td>
<td>no significant elastomeric property change</td>
</tr>
<tr>
<td>Hydrolysis (Sodium Hypochlorite 5%, 10 days)</td>
<td></td>
<td>-</td>
<td>no significant elastomeric property change</td>
</tr>
<tr>
<td>Water absorption</td>
<td></td>
<td></td>
<td>&lt; 1.4%</td>
</tr>
</tbody>
</table>
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