QUICSEAL 164

Product Name
Hyperflex 2K

Root Resistant, Polyurethane-Bitumen liquid Membrane for waterproofing & protection.
Two Components Ratio 1 by 1 fast curing

Description
QUICSEAL164 is a fast-curing two-component polyurethane liquid. It produces an elastic strong film with excellent adhesion to different surfaces.

The final film possesses extremely high mechanical and chemical properties.
Apply with brush, roller or airless in one or two coats with minimum total consumption of 1 - 1.2lt/m².

The product is based on pure elastomeric hydrophobic polyurethane resins and has been extended with chemically polymerised virgin bitumen.
- The product, in case, can be applied in one thick coat with no bubbling or other defects.
- It can be charged with mineral fillers easily due to the low viscosity.
- It can be used as joint sealant.
- The 1/1 by volume ratio gives to the applicator the possibility to use part of the product. This makes the system an economic and versatile tool absolutely indispensable for professionals.

Recommended for
Waterproofing and protection of:
- Roofs
- Water tanks
- Platforms of bridges
- Irrigation channels
- Basement walls
- Light roofing from metal or fibrous cement
- Verandas and balconies
- Bathrooms
- Gypsum and cement boards
- Asphalt membranes
- EPDM membranes
- Polyurethane insulation foams

Limitations
- Not recommended for unsound substrates.
Features & Benefits

• Excellent adhesion on almost any surface, with or without special primers.
• No thinning is required but in case it can be thinned solvent-01.
• Excellent thermal resistance, the product never returns soft, Max service temperature 80ºC, Max shock temperature 200ºC.
• Resistance in the cold: the film remains elastic even down to -40ºC
• Excellent mechanical properties, high elongation, tensile and tear strength, abrasion resistance.
• Excellent chemical resistance.
• Moisture vapor transmission barrier.
• Can be used also as joint sealant.
• Resistant to root penetration.

Application

Concrete, fibrous cement, mosaic, cement roof tiles, old (but well adhered) acrylic and asphalt coats, wood, corroded metal, galvanized steel.

Concrete substrate conditions (standard):

- Hardness: $R_{28} = 15$MPa
- Humidity: $W < 10\%$
- Temperature: from 5ºC - 35ºC
- Relative humidity: <85%

Surface Preparation

Clean the surface, using jet water if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, curing membrane must be removed. Fill surface irregularities with adequate products.

Prime

Prime surface with QUICSEAL133 primer. Please refer to QUICSEAL133 technical data sheet for more information.

Mix

Open the two pails, take equal volumes, one from the resin and one from the bitumen. Mix well Use a low speed (300rpm) electric drill.

Apply immediately. Pot Life 30-45min.

Mixing Ratio: 1/1 by volume

Place

Apply the material with roller, brush or spatula in one or two coats.

You can add inorganic fillers, like silica, accordingly.
Precautions
QUICSEAL164 contains a small quantity of volatile flammable Solvents. Apply in well-ventilated areas. Don’t smoke. Apply far away from naked flames. In closed areas use force ventilation and carbon active masks. Keep in mind that solvents are heavier than air so they creep on the floor. Ask for MSDS (Material Safety Data Sheet)

Consumption
Minimum Total Consumption: 1-1.5 ltr/m² per 2 to 3 coats

Cleaning
Clean tools and equipment first with paper towels and then wipe by using Solvent-01®. Do not try to clean rollers it is not worthwhile.

Packaging
20+20 ltrs

QUICSEAL164 can be kept for minimum 12 months in the original unopened pails at a temperature of 5ºC - 25ºC in dry places.
When you open pails try to close again hermetically.

Technical Specifications of Hyperflex 2K

<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, at 25°C</td>
<td>1300</td>
</tr>
<tr>
<td>-Resin-A</td>
<td></td>
<td></td>
<td>4300</td>
</tr>
<tr>
<td>-Component-B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viscosity of the mixture (BROOKFIELD)</td>
<td>CP</td>
<td>ASTM D2196-86, at 25°C</td>
<td>3000</td>
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<tr>
<td>Specific weight of the mix</td>
<td>gr/cm³</td>
<td>ASTM D1475 / DIN 53217 / ISO 2811, at 20°C</td>
<td>0.97</td>
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<tr>
<td>Flash point</td>
<td>ºC</td>
<td>ASTM D93, Closed cup</td>
<td>&gt;50</td>
</tr>
<tr>
<td>Tack free time at 77 deg F (25ºC) &amp; 55% RH</td>
<td>Hours</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Recoat time</td>
<td>Hours</td>
<td>-</td>
<td>6 to 24</td>
</tr>
</tbody>
</table>
### The Film

<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 80</td>
</tr>
<tr>
<td>-Max. Temperature short time (shock)</td>
<td>°C</td>
<td>-</td>
<td>150</td>
</tr>
<tr>
<td>-Hardness</td>
<td>Shore A</td>
<td>ASTM  D2240 / DIN 53505 / ISO R888</td>
<td>35</td>
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<tr>
<td>-Tensile Strength at break at 23 °C</td>
<td>Kg/cm² (N/mm²)</td>
<td>ASTM D412 / DIN 52455</td>
<td>20 (2)</td>
</tr>
<tr>
<td>-Percent Elongation at 23°C</td>
<td>%</td>
<td>ASTM D412 / DIN 52455</td>
<td>&gt;2500</td>
</tr>
<tr>
<td>Recovery from 200% Elongation</td>
<td>%</td>
<td>ASTM D12 : 06ae²</td>
<td>200</td>
</tr>
<tr>
<td>-Service temperature</td>
<td>°C</td>
<td>-</td>
<td>-40 to 80</td>
</tr>
<tr>
<td>Water Penetration at 4 Bar for 6 hours</td>
<td>mm</td>
<td>DIN 1048 Part 5</td>
<td>No water penetration</td>
</tr>
<tr>
<td>-Adhesion Concrete</td>
<td>Kg/cm² (N/mm²)</td>
<td>ASTM D4541</td>
<td>&gt;20 (&gt;2)</td>
</tr>
<tr>
<td>-Tensile set (after 300% Elongation)</td>
<td>%</td>
<td>ASTM D412</td>
<td>&lt;1%</td>
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</tbody>
</table>

### CHEMICAL Resistance:

- Sodium Hypochlorite 5% Unaffected
- Potassium Hydroxide 8% at 50°C 10 days Unaffected
- Water Absorption after 10 days <0.9%

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**Important Notes**

The information set forth herein is furnished in good faith and is based on technical data that QUICSEAL considers to be reliable. This information is intended for used by persons having technical skill and at their own discretion and risk. Information contained in this product sheet conforms to the standard detail recommendations and specifications for the installation of QUICSEAL products as of the date of publication of this document. QUICSEAL makes no other warranties and assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. To ensure that you are using the latest, most complete information, contact QUICSEAL.

Reference No. QUICSEAL164/301116

**QUICSEAL CONSTRUCTION CHEMICALS PTE LTD**