Polyflex 311
polyurea

Product Description

Wasser Polyflex 311 is a high performance polyurea coating for steel, concrete and geo-textile liners. Wasser Polyflex 311 is designed with an extended gel time for better leveling and high abrasion resistance for demanding industrial applications. Wasser Polyflex 311 provides for less shrinkage and improved elongation thus making it an ideal choice for bridge deck waterproofing and secondary containment.

Product Features

- Seamless and flexible waterproofing membrane
- No VOC, low odor
- Impact, tear and abrasion resistant.
- Bridges moving cracks up to 1/8”
- Can be placed back in immersion water service in as little as 24 hours.
- Excellent for use on geo-textile applications.

Ready Reference Information

<table>
<thead>
<tr>
<th>Color:</th>
<th>Several Colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of cure:</td>
<td>2 component</td>
</tr>
<tr>
<td>Resin Type:</td>
<td>Polyurea</td>
</tr>
<tr>
<td>*Solids by volume:</td>
<td>100%</td>
</tr>
<tr>
<td>*Solids by weight:</td>
<td>100%</td>
</tr>
<tr>
<td>V.O.C.</td>
<td>None</td>
</tr>
</tbody>
</table>

| Recommended dry film thickness/coat: | 30-100 mils (762-2540 µm) |
| Theoretical Coverage: | At 1 mil: 1,604 ft²/gal (At 25 µm: 39.4m²/l) |
| Ratio: | 1:1 |
| Catalyst: | WP311A |
| Pot Life: | N/A |

<table>
<thead>
<tr>
<th>DRY TIMES</th>
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</thead>
<tbody>
<tr>
<td>Gel Time</td>
</tr>
<tr>
<td>Tack Free</td>
</tr>
<tr>
<td>Re-coat Maximum¹</td>
</tr>
<tr>
<td>Hard Dry</td>
</tr>
<tr>
<td>Immerse</td>
</tr>
</tbody>
</table>

¹Scuff sanding or apply WP-50 Activator before re-coating with Wasser Polyflex 311 outside of this time frame.

Recommended Systems

Concrete Bridge Deck Waterproofing System:

- Polyflex 111 PU Primer
- Polyflex 311 Membrane
- Polyflex 411 ShearCoat
- Polyflex 511 TackCoat

*Note: Other systems are available. Contact your Wasser Representative to answer any questions

Surface Preparation

See Wasser’s Polyflex Elastomeric Coatings Installation Procedure.

Area of Use

Substrates
- Steel
- Concrete And CMU
- Ductile Iron
- Geo-textile
- Galvanized Metal

Possible Uses
- Bridge Deck Waterproofing
- Secondary Containment
- Water and Waste Water Treatment Facilities
- Chemical Processing Facilities
- Refineries
- Pulp and Paper Mills
- Food Processing Facilities
- Dry Holds/Wet Holds

Dry Times

| Gel Time | 10-15 seconds |
| Tack Free | 20-30 seconds |
| Re-coat Maximum¹ | 12 hours |
| Hard Dry | 8 hours |
| Immerse | 24 hours |

¹Scuff sanding or apply WP-50 Activator before re-coating with Wasser Polyflex 311 outside of this time frame.
Application Information

**Plural component heated pump:** In order to obtain the optimum results outlined below, system must be capable of applying at pressures greater than 2,500 psi and at temperatures of 140 - 160°F.

Before application, the receiving coat surface must be cleaned of dirt, soluble salts, dust, oils, grease, chalking, and other contaminants. Normal preparation includes vacuum, blow-off, SSPC-SP-1 “solvent cleaning”. This product is normally applied over previously primed surfaces.

Take care to ensure that proper film thickness is achieved. For more information, consult the Steel Structures Painting Council (SSPC) publication, Good Painting Practice.

Performance Testing Data

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids Content %:</td>
<td>100</td>
</tr>
<tr>
<td>Shore Hardness, D:</td>
<td>53</td>
</tr>
<tr>
<td>Elongation %:</td>
<td>411</td>
</tr>
<tr>
<td>Tensile Strength, psi:</td>
<td>2,049</td>
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<tr>
<td>Tear Strength, pli:</td>
<td>393</td>
</tr>
<tr>
<td>Taber Abrasion, mg loss:</td>
<td>9.4</td>
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<tr>
<td>Moisture Vapor Transm. Perms:</td>
<td>0.46</td>
</tr>
<tr>
<td>Crack Bridging Test, 1/8&quot;</td>
<td>Pass</td>
</tr>
<tr>
<td>80 mils at 15°F for 40 Cycles with 1/8&quot; opening</td>
<td></td>
</tr>
</tbody>
</table>

Ordering Information

**Product Numbers:**
- WP311 A (Catalyst)
- WP311 B (Resin)

**Package Size:**
- 5 gallon pails (10 gallon sets)
- 55 gallon drums (110 gallon drum sets)

**Order in sets only**

**Shelf Life:**
1 year

**Flash Point:**
300.2° F (149°C)

Safety Precautions

**Precaution:**

See the material safety data sheet and product label for complete safety and precaution requirements.

“The following is made in lieu of all warranties, expressed or implied: Manufacturer’s obligation shall be to replace such quantity of the product proven to be defective.

The manufacturer shall not be liable for any injury, loss or damage, direct or incidental or consequential, arising out of the use of or the inability to use the product.

Before using, the user shall determine the suitability of the product for the intended use and the user assumes all risk and liability whatsoever in connection therewith.

All values shown are approximations. Values indicated are for guide purposes only, as actual values can change due to application conditions, application methods, environmental conditions etc.

The information contained herein is subject to change without notice.” Contact your Wasser Representative for current Product Data Sheets.