**Product Description**

Polyeuro® 5502 is a fast setting, rapid curing, 100% solids, flexible, aromatic, two component spray polyurea that can be applied to suitably prepared concrete and metal surfaces. It has extremely fast gel time making it suitable for applications down to -20°F (-28.89°C). It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures. Polyeuro® 5502 offers a tack free time of less than sixty seconds and exhibits 400% ± 50% elongation upon curing with 50 Shore D hardness.

**FEATURES**

- Zero VOC (100% Solids)
- Seamless
- Excellent Thermal Stability
- Elastomeric
- Low Temperature Flexibility
- Odorless
- Good Chemical Resistance
- Meets USDA Criteria
- Coats Carbon or Mild Steel Metals Without Primer
- Installed With or Without Reinforcement in Transitional Areas

**TYPICAL USES**

- Airports
- Power Plants
- Refineries
- Structural Steel
- Fertilizer Plants
- Warehouse Floors
- Mining Operations
- Cold Storage Facilities
- Marine Environments
- Paper and Pulp Mills
- Food Processing Plants
- Landfill Containment
- Secondary Containment
- Parking Garage Decks
- Walkways and Balconies
- Water and Wastewater Treatment Plants
- Industrial and Manufacturing Facilities

**PACKAGING**

- 5 gallons (18.9 liters) Side-A (Isocyanate side) and 5 gallons (18.9 liters) Side-B (Resin side)
- 50 gallons (189 liters) Side-A (Isocyanate side) and 50 gallons (189 liters) Side-B (Resin side)

**TECHNICAL DATA (BASED ON DRAW DOWN FILM)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mix Ratio by Volume</td>
<td>1A : 1B</td>
</tr>
<tr>
<td>Pot Life @ 75°F (24°C), 50% R.H.</td>
<td>4 - 8 seconds</td>
</tr>
<tr>
<td>Tack Free Time (thickness &amp; substrate temperature dependent)</td>
<td>45 - 60 seconds</td>
</tr>
<tr>
<td>Recoat Time</td>
<td>0 - 6 hours</td>
</tr>
<tr>
<td>Viscosity at 150-160°F (66.5-71°C)</td>
<td>100 ± 20 cps</td>
</tr>
<tr>
<td>Side-B</td>
<td>50 ± 20 cps</td>
</tr>
<tr>
<td>Density (Side A &amp; B Combined)</td>
<td>8.81 lbs/gal</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 200°F (93.3°C)</td>
</tr>
<tr>
<td>Hardness, ASTM D-2240</td>
<td>50 ± 5 Shore D</td>
</tr>
<tr>
<td>Tensile Strength, ASTM D-412*</td>
<td>3000 ± 200 psi, 20.68 ± 1.37 MPa</td>
</tr>
<tr>
<td>Elongation, ASTM D-412*</td>
<td>400 ± 50%</td>
</tr>
<tr>
<td>Tear Resistance, ASTM D-412*</td>
<td>450 ± 50 pli, 78.8 ± 8.8 kNm</td>
</tr>
<tr>
<td>Service Temperature - Dry</td>
<td>-40°F to 250°F, -4°C to 121°C</td>
</tr>
<tr>
<td>Service Temperature - Wet</td>
<td>40°F to 120°F, 4.44°C to 48.89°C</td>
</tr>
</tbody>
</table>

(*These physical properties from sample sprayed with Graco EXP2 @ 2000 psi minimum, with Fusion Gun AP4242 @ 150-160°F (65°C to 71°C) blistering. Color change, gloss reduction & chalking are noted. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate).

**Colors**

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Side-B.

Due to its aromatic composition, Polyeuro® 5502 will tend to yellow or darken in color and will become flat after exposure to UV light. A topcoat can be applied to Polyeuro® 5502 within six hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

**Coverage**

Polyeuro® 5502 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil (0.254 microns) thickness is one gallon per 1600 sqft (3.78 liters per 149 sqm).

**Surface Preparation**

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating previously used substrates, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference. For project-specific questions, contact Polycoat.
NEW AND OLD CONCRETE
Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign material by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptable rough surface, Polycat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

CONCRETE SURFACE PREPARATION REFERENCE

WOOD
All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

STEEL (ATMOSPHERIC AND IMMERSION EXPOSURE)
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyurethane onto any bare metal the same day as it is cleaned to minimize any potential flash rusting.

ALUMINUM
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

BRASS AND COPPER
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

GALVANIZED SURFACES
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

FIBERGLASS REINFORCED PLASTIC
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

PLASTIC FOAMS
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

TEXTILES, CANVAS, FABRICS
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

STAINLESS STEEL
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

NEW AND OLD CAST IRON
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

ALL OTHER SURFACES
An adhesion test is recommended prior to starting the project.

Mixing
Polyurethane 5502 may NOT be diluted under any circumstances. Thoroughly mix Polyurethane 5502 Side-B (Resin side) with air driven power equipment until a homogeneous mixture and color is achieved.

Application
Both Side-A and Side-B materials should be preconditioned to 75-80°F (24-27°C) before application. Recommended surface temperature must be at least 5°F (3°C) above the dew point. Polyurethane 5502 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used. Both Side-A and Side-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F (66°C). Adequate pressure and temperature should be maintained at all times. Polyurethane 5502 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

Storage
Polyurethane 5502 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C). Side-A and Side-B drums are recommended to be stored above 60°F (15°C). Avoid freezing temperatures. Store drums on wooden pallets to avoid direct contact with the ground. If stored for a long period of time, rotate Side-A and Side-B drums regularly.

Limitations
Do not open until ready to use. Both Side-A and Side-B containers must be fitted with a desiccant device during use.

Warning
This product contains Isocyanates and Curative Material.

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Section 9.1