Product Description
Polyeuro® 5502-F 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-F offers a tack free time of less than sixty seconds and exhibits 375% ± 50% elongation upon curing with 50 Shore D hardness.

TECHNICAL DATA (BASED ON DRAW DOWN FILM)

<table>
<thead>
<tr>
<th>Mix Ratio by Volume</th>
<th>1A : 1B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot Life @ 150°F (65.5°C), 50% R.H.</td>
<td>4 - 8 seconds</td>
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<tr>
<td>Tack Free Time (thickness &amp; substrate temperature dependent)</td>
<td>45 - 60 seconds</td>
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<tr>
<td>Recoat Time</td>
<td>0 - 6 hours</td>
</tr>
<tr>
<td>Viscosity at 150-160°F (65.5-71°C) Side-A</td>
<td>100 ± 20 cps</td>
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<tr>
<td>Side-B</td>
<td>50 ± 20 cps</td>
</tr>
<tr>
<td>Density (Side A &amp; B Combined)</td>
<td>8.75 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</td>
</tr>
<tr>
<td></td>
<td>20.68 ± 1.37 MPa</td>
</tr>
<tr>
<td>Elongation, ASTM D-412*</td>
<td>375 ± 50%</td>
</tr>
<tr>
<td>Tear Resistance, ASTM D-412*</td>
<td>450 ± 50 pli</td>
</tr>
<tr>
<td></td>
<td>78.8 ± 8.8 kNm</td>
</tr>
<tr>
<td>Service Temperature - Dry</td>
<td>-40°F to 250°F</td>
</tr>
<tr>
<td></td>
<td>40°C to 121°C</td>
</tr>
<tr>
<td>Service Temperature - Wet</td>
<td>40°F to 120°F</td>
</tr>
<tr>
<td></td>
<td>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-F 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-F within six hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

Coverage
Polyeuro® 5502-F 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).

Estimating Formula: (1600 sqft per gal /Dry Mil Thickness) x Solids Content = Application Rate per gallon.

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 matter 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 unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spills, 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 Polycoat 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 3-4 mils. Prime and shoot Polyeuro® onto any bare metal the same day as it is cleaned to minimize any potential flash rusting.

**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. Contact Polycoat Products for recommended primer. 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.

**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. Contact Polycoat Products for recommended primer.

**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**

Polyeuro® 5502-F may NOT be diluted under any circumstances. Thoroughly mix Polyeuro® 5502-F 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. Polyeuro® 5502-F 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. Polyeuro® 5502-F should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

**Storage**

Polyeuro® 5502-F 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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