POLYQuik® P-690

Color Stable Aliphatic Polyurea Coating

DESCRIPTION
POLYQuik® P-690 is a two-component aliphatic polyurea specifically designed as a floor coating. It has excellent outdoor weathering characteristics and outstanding impact and abrasion resistance. It cures quickly for rapid return-to-service and for same day application of multiple coats. POLYQuik® P-690 can be applied by roller or brush.

WHERE TO USE
- Floor Coating—smooth or aggregate-filled
- Topcoat—apply for color stability
- Protective Coating—concrete, wood, metal
- Walkway Surfaces—slip-resistant with aggregate

FEATURES AND BENEFITS
- Color Stable—excellent weathering resistance
- Fast Cure Time—quick return to service
- Flexible & Tough—absorbs impact & scratch resistant
- Easy to Apply—roller, brush

PACKAGING
- 4-gal kits (15.1 L)  Gray, White
- 5-gal pail (18.9 L)  Yellow, Blue
- 50-gal drum (189 L)  Green, Orange
  *Additional colors and packaging options may be available. Contact your WVCO representative and refer to the color palette for more information.

COLORS
- Black

YIELD
- 260 ft² per gal. at 6 mils
  (6.4 m² per liter at 0.15 mm)

SHELF LIFE
- 6 months when properly stored.

STORAGE
- Store and ship in a clean, dry, low-humidity, shaded or covered environment at 60-90°F (15 to 32°C).

TECHNICAL INFORMATION

<table>
<thead>
<tr>
<th>Typical Properties</th>
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<tbody>
<tr>
<td>VOC, lb/gal (g/L), ASTM D 2369</td>
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<tr>
<td>Viscosity, cps, ASTM D 4878, resin / iso</td>
</tr>
<tr>
<td>Hardness, Shore D, ASTM D 2240</td>
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<tr>
<td>Service temperature, ° F (° C)</td>
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<thead>
<tr>
<th>Chemical Resistance (Recommended, Not recommended, Conditional)</th>
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<tbody>
<tr>
<td>Chemical</td>
</tr>
<tr>
<td>Diesel</td>
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<tr>
<td>Water</td>
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<tr>
<td>Acetone</td>
</tr>
<tr>
<td>Saturated Caustic</td>
</tr>
<tr>
<td>12% Sod. Hypochlorite</td>
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<tr>
<td>10% Sulfuric Acid</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Processing Parameters</th>
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<tbody>
<tr>
<td>Ratio by volume, resin to iso</td>
</tr>
<tr>
<td>Application temp., ° F (° C)</td>
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<tr>
<td>Recommended thickness, mils (mm)</td>
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<table>
<thead>
<tr>
<th>Cure Time</th>
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<tbody>
<tr>
<td>Surface Temp. 50% RH, ° F (° C)</td>
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<tr>
<td>-------------------</td>
</tr>
<tr>
<td>32 (0)</td>
</tr>
<tr>
<td>50 (10)</td>
</tr>
<tr>
<td>77 (21)</td>
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<tr>
<td>100 (38)</td>
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**APPLICATION**

**SURFACE PREPARATION**

**WOOD**
1. Store wood in a covered, dry location, and protect surface from damage and contamination.
2. For a completely uniform appearance in the finished product, fill all voids, spaces, or damaged areas prior to priming. Repair or fill areas with HPU-FILLER or other suitable filler. Contact WVCO representative for filler options and technical recommendations. Remove any excess filler by sanding until level with surrounding area.
3. Ensure wood surface is smooth and dry. Surface must have a 36-120-grit surface and less than 10% surface moisture.
4. Priming is required: Prime with POLYQuik Epoxy Primer, PolyPrime, or other suitable primer. Contact WVCO representative for primer options and technical recommendations. Refer to primer technical data sheet for application and cure time information.

**CONCRETE**
1. Priming is required; prime with POLYQuik Epoxy Primer, PolyPrime, or other suitable primer. Contact WVCO representative for primer options and technical recommendations. Refer to primer technical data sheet for application and cure time information.
2. The surface being coated must be fully cured (28 days minimum), structurally sound (200 psi or greater tensile strength according to ASTM D 7234), clean (ASTM D 4258), and dry (less than 5% moisture content, ASTM E 1057 and D4263). The surface must have low moisture-vapor transpiration (less than 3 lb/hr/1,000 ft², RMA Test Method).
3. Do not apply over concrete if vapor barrier is not present or unknown.
4. Profile surface according to ICRI Guide 03732 to a minimum of CSP 3 by abrasive blasting or hydroblasting. Remove contaminants before blasting.
5. Spray elastomer coating must be less than 12 hours old for POLYQuik® P-690 to adhere without preparing the coating surface.
6. Mix for 60 minutes. Scrape the sides and bottom of the bucket with a straight edge and continue to mix for an additional 60 seconds. All of the isocyanate must be thoroughly incorporated into the resin before application. The MATERIAL WILL NOT SET IF IT IS IMPROPERLY MIXED. Signs of poor mixing include dark swirls and tacky material that does not harden.
7. Keep lid on the mixing container while product is not being used.
8. Pour material onto substrate surface. Do not turn bucket over and allow material to drain, or scrape last remaining material out of bucket, in case unmixed material remains on the bottom or sides.

**APPLICATION**
1. Ensure surface is primed according to Surface Preparation guidelines.
2. Avoid blisters and poor adhesion by not applying coating when the humidity is above 85%. Apply the coating when the substrate temperature is stable or dropping. Minimize out-gassing and pinholes on porous substrates by properly applying primers.
3. Add the isocyanate component into resin container. Combine the entire quantity of the kit and do not mix smaller volumes. Only mix the amount of material that can easily be applied within 15 minutes. Do not dilute with solvent.
4. Mix for 60 seconds. Scrape the sides and bottom of the bucket with a straight edge and continue to mix for an additional 60 seconds. All of the isocyanate must be thoroughly incorporated into the resin before application. The MATERIAL WILL NOT SET IF IT IS IMPROPERLY MIXED. Signs of poor mixing include dark swirls and tacky material that does not harden.
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**NOTE:** Other techniques and methods can be used. It is the responsibility of the applicator to determine suitability and work flow.

**SQUEEGEE AND BACKROLL**
1. Pour POLYQuik® P-690 in a long line and follow with a 1/8” serrated squeegee.
2. Use ¼” nap mohair roller (9” or 18” wide) to back roll.
3. Roll perpendicular to squeegee to remove puddles.
4. POLYQuik® P-690 thickness should be 6 mls minimum and 12 mls maximum wet film thickness. Use a wet film gauge to check the thickness of the product. After product cures, remove any blisters that rise out of concrete pores.
5. Apply next coat only after the basecoat is hard and tack-free. Refer to recoat schedule for cure window.

**FOR SLIP RESISTANCE**
1. Spread POLYQuik® Epoxy Primer over the concrete surface with a 1/8” serrated squeegee and back roll until the product is spread evenly. Cover the area with desired mesh sand to refusal (contact WVCO representative for sand information). Allow the product to cure 12-24 hours and remove excess sand. Spread POLYQuik® P-690 with a flat squeegee and back roll.
2. POLYQuik® P-690 thickness should be 6 mls minimum and 12 mls maximum wet film thickness. Use a wet film gauge to check the thickness of the product. After product cures, remove any blisters that rise out of concrete pores. Recut if desired.
3. An alternate method is to IMMEDIATELY and UNIFORMLy broadcast sand into the wet POLYQuik® P-690 and back roll.

**CLEANING & MAINTENANCE**
- Clean equipment with POLYQuik® Cleaner or acetone immediately after use. Cured material must be removed mechanically.

**HEALTH AND SAFETY**

Before handling, you should become familiar with the Material Safety Data Sheet (MSDS) regarding the risks and safe use of this product. To obtain an MSDS please call 800-333-9826 or send an email to: msds@wilvaco.com

**DISCLAIMER OF WARRANTY**

ANY CHEMICAL COMPOUNDS OR USE THEREOF ARE NOT SUBJECT TO A CLAIM BY A THIRD PARTY FOR INFRINGEMENT OF ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. EACH USER SHOULD CONDUCT A SUFFICIENT INVESTIGATION TO ENSURE THE SUITABILITY OF ANY PRODUCT FOR ITS INTENDED USE. PROPER APPLICATION IS THE RESPONSIBILITY OF THE USER. AS WITH ANY PRODUCT THE USE OF THE THS PRODUCT IN A GIVEN APPLICATION MUST BE TESTED INCLUDING BUT NOT LIMITED TO FIELD TESTING IN ADVANCE BY THE USER TO DETERMINE SUITABILITY. TESTING IS THE REQUIREMENT OF BOTH ENGINEERS AND CONTRACTORS ALIKE. WVCO DOES NOT WARRANT THE APPLICATION UNDER ANY OR ALL CIRCUMSTANCES.

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Revision Date Sept. 2013