



Qualipur[®] 461

Features and Benefits

1. General Description

Qualipur 461 is a 1-component, medium viscosity, UV stable polyurethane elastic coating. It cures using moisture in the atmosphere to produce a topcoat sealer with excellent abrasion resistance. Qualipur 461 has excellent chemical resistance making it the ideal flexible topcoat.

Basic Uses: A UV-stable, abrasion, and chemical resistant topcoat.

Colors: A gloss finish product available in 5 standard colors: Light Grey, Dark Grey, Charcoal, Tan, and Black. Special colors are available upon request.

2. Safety Guidelines

Always wear the recommended personal protective equipment. Avoid contact with eyes, skin, and clothing. Adequate ventilation is required during the application process.

Do not expose container to open flame, excessive heat, or direct sunlight.

3. Storage and Packaging

Qualipur 461 should be stored in a clean, cool, dry area in original unopened pail. Qualipur 461 has a shelf life of 6 months.

Packaging: 5 gallon unit (20.3 kg unit)

4. Coverage

For reference 1 mil of Qualipur 461 has a consumption rate of 1333 sqft/gallon (0.00075 gals/ft² or 0.0326 kgs/m²).

5. Installation Guidelines

Surface Preparation:

Surfaces receiving an application of Qualipur 461 must be clean, sound, dry, free of oils and all bond inhibiting compounds and contaminants. When applying Qualipur 461 to a concrete substrate, use of mechanical methods such as shot blasting or sandblasting are recommended to produce a clean and

- ✓ One component
- ✓ Chemical/abrasion resistant
- ✓ Breathable – use for on grade application
- ✓ Moisture insensitive during cure
- ✓ Will not foam or develop CO₂ Gassing at high humidity
- ✓ UV Stable
- ✓ Variety of color options



lightly textured surface. When top coating a system, consult your sales representative if the recommended recoat time is exceeded or if contamination of the substrate occurs.

Mixing:

Although Qualipur 461 is a 1-component polyurethane product, it still requires mixing to ensure consistent curing and uniform color. Mixing is accomplished by using a jiffy paddle and low speed drill (400 to 600 rpm) and blend for 1 to 2 minutes so as not to incorporate excessive air into the product.

Application:

PRIOR TO APPLICATION, REMOVE ALL SOURCES OF IGNITION.

Top Coat Over Systems - Use a high quality roller, brush, or squeegee to apply a uniform film at the recommended rate but not exceeding 20 mils per coat. Sand, 12-20 mesh (angular) or 16-30 mesh (angular), flint (angular), or aluminum oxide (angular) can be applied by backrolling after application of the coating.

Never sand to excess the Qualipur 461 top coat - sand saturation shall be in the Qualipur 372 coat.

6. Limitations

- **If round sand is used, sand can and will clump causing foaming and premature wear.**
- Minimum application temperature is 40°F (4°C) and rising.
- Do not apply over damp or wet substrates.
- Do not apply to surfaces with active moisture vapor transmission.

7. Technical Data

Results based on temperature of 68°F and 50% Humidity

VOC		166 g/L*
Viscosity	ASTM D2196	2000-4000 cPs
Cure Time – Tack Free		5-10 Hours
- Foot Traffic	ASTM C920	24 Hours
- Final Cure		Humidity Dependent (Ave. 7 Days)
Elongation	ASTM D412	264.3%
Tensile Strength	ASTM D412	1111.0 PSI
Hardness	ASTM D2240	84 A Scale
Abrasion Resistance	ASTM D4060	24.9 mg loss
Ozone Resistance	ASTM D1149	No visible cracking occurred
Skid Resistance Dry	ASTM C1028	0.8595
Skid Resistance Wet	ASTM C1028	0.8631
Thermal Emittance (Tan)	ASTM C1371	0.90
Solar Reflectance (Tan)	ASTM C1549	53.6%





Solar Reflective Index (Tan)	ASTM E1980	63
Solvent and Fuel Resistance	ASTM D2792	No negative observation

*based on standard formula calculation

Chemical Resistance Chart

Chemical	Qualipur 372	Qualipur 461	Qualipur 512	Qualipur 522	Qualipur 552E	Qualipur 572
Acetic Acid 10%	-	-	+	+	-	+
Acetic Acid 50%	-	-	-	+	-	-
Acetone	+	+	+	+	+	-
Anti-Freeze	+	+	+	+	+	+
Bleach	-	+	+	+	+	+
Brake Fluid	-	-	-	-	-	-
Caustic Soda	+	+	-	+	+	+
Gasoline	+	+	+	+	+	-
Hydraulic Fluid	+	+	+	+	+	+
Hydrochloric Acid 10%	-	-	-	+	+	+
Hydrochloric Acid 31%	-	-	-	-	-	-
Jet Fuel	+	+	+	+	+	+
Methanol	+	+	+	+	-	-
Mineral Spirits	+	+	+	+	+	+
Motor Oil	-	+	-	+	+	+
Phosphoric Acid 50%	+	-	-	+	-	-
Phosphoric Acid 70%	-	-	-	-	-	-
Potassium Hydroxide 50%	-	-	-	-	+	+
Simple Green	+	+	+	+	+	+
Skydrol	-	-	-	+	-	-
Sodium Hydroxide 50%	+	+	+	+	+	+
Sulfuric Acid 25%	-	-	-	-	-	-
Sulfuric Acid 50%	-	-	-	-	-	-

(-) --> Visual Defects Observed

(+) --> No Visual Defects Observed

Above figures are guide values and should not be used as a base for specifications

Consult the Safety Data Sheet (SDS) for more Details.

For complete and latest warranty and product information, please visit www.advpolytech.com

