



Qualipur[®] 512

Features and Benefits

- ✓ High abrasion and cut/tear resistant
- ✓ Excellent UV stability
- ✓ Versatile range of potential substrates
- ✓ Variety of color options
- ✓ Low VOC

1. General Description

Qualipur 512 is a 2-component, low VOC, low/no odor, medium viscosity, polyurethane coating. It cures using chemical cross-linking to form a hard elastic, UV resistant, abrasion-resistant coating. Qualipur 512 has good chemical resistance and outstanding adhesion properties.

Basic Uses: A highly abrasion-resistant coating.

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 512 should be stored in a clean, cool, dry area in original unopened pail.

Packaging: 5 gallon unit (25.6 kg unit)

4. Coverage

For reference 1 mil of Qualipur 512 has a consumption rate of 1600 ft²/gal (0.00063 gal/ft² or 0.04060 kg/m²).

5. Installation Guidelines

Surface Preparation:

Surfaces receiving an application of Qualipur 512 must be clean, sound, dry, free of oils and all other bond inhibiting compounds and contaminants. Apply Qualipur 512 on primed concrete or Qualipur surfaces that have received the recommended surface preparation (sandblasting or shot blasting are recommended to produce a clean and lightly textured surface).



If the recommended recoat time is exceeded or if contamination of the substrate occurs, consult your sales representative, when top coating a system.

Mixing:

Qualipur 512 is a 2-component polyurethane product; it requires mixing to ensure consistent curing and uniform color. Mixing is accomplished by premixing component “A” for 2-3 minutes. After premixing component “A”, pour the contents of component “B” directly into component “A” and mix using a jiffy paddle and low speed drill (400 to 600 rpm). Take care not to incorporate excessive air into the product. Mix components for 2 minutes in provided pail. Scrape down sides of pail and mix for an additional 1.5 minutes before proceeding with application.

Application:

Top Coat Over System – Use a high quality roller, brush, or squeegee to apply a uniform film at the recommended rate. 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 512 top coat - sand saturation shall be in the Qualipur 372 coat.

Consult Application Guide for further information.

6. Limitations

- **If round sand is used, sand can and will clump causing foaming and premature wear.**
- Minimum application temperature is 4°C (40°F).
- 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 | | 31 g/L* |
| Solids Content | | 96% |
| Renewable Content | | 15.53% |
| Viscosity | ASTM D2196 | 3000 – 4000 cPs |
| Pot Life | ASTM C603 | 35-55 Minutes |
| Cure Time – Tack Free | | 3 – 5 Hours |
| - Foot Traffic | ASTM C920 | 24 Hours |
| - Final Cure | | 4 Weeks |
| Elongation | ASTM D412 | 42.9% |
| Tensile Strength | ASTM D412 | 4300 PSI |
| Hardness | ASTM D2240 | 60 D scale |
| Abrasion Resistance | ASTM D4060 | 28.6 mg loss |
| Flash Point | ASTM D93 | Non Flammable |

*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

