



IMPERIAL POLY250

TWO COMPONENT SOLVENT BASED CLEAR URETHANE TECHNICAL DATA & APPLICATION INSTRUCTION

PRODUCT DESCRIPTION

Imperial Poly 250 is a UV Resistant, specially formulated, two component, low viscosity acrylic urethane. This product provides a tough, scratch resistant, high gloss protective coating for interior and exterior use.

BENEFITS/FEATURES

- Provides high gloss, abrasion resistant finish
- Superior UV stability outperforms many similar products on today's market

RECOMMENDED APPLICATIONS

Imperial Poly 250 is recommended for use on interior or exterior industrial and decorative concrete surfaces in commercial, retail, and high traffic areas.

TECHNICAL INFORMATION

Abrasion Resistance.....65 - 70 mg loss (Tabler Index, ASTM 4060-81, CS-17 Abrasion Wheel, 1000 gram load) Gloss 60°.....92	VOC.....400 grams/liter
Elongation (ASTM D882-67).....5.1 - 7.1%	Mix Ratio (a/b volume).....4 to 1
Flexibility (1/8" Mandrel).....Pass	Coverage (3 mils drf.).....280 sq. ft./gal
Hardness (7 days).....5H - 6H	Viscosity.....85-87 KU
Heat Resistance.....300° F	Pot Life.....45 Minutes
Water Resistance.....Excellent	Dry Time-Set to Touch (50% R.H. @ 72° F).....2-3 hours
Solids % Wt (Federal Spec. TTP-141B).....51%	Dry Time-Recoat (50% R.H. @ 72°F).....4-8 hours
Density lbs/Ga. (Federal Spec. TTP-141B).....8.51	Dry Time-Light Traffic (50% R.H. @ 72° F).....24 hours
Flash Point.....80°F	Dry Time-Cure (50% R.H. @ 72° F).....72 hours
	Dry Time-Full Cure (50% R.H. @ 72°F).....7 days
	Solvent.....Xylene, Butyl Acetate, Aromatic 100

CHEMICAL & STAIN RESISTANCE (ASTM D- 1308 24 HOUR IMMERSION)

Wine.....No Effect	Urine.....No Effect
Gasoline.....No Effect	Motor Oil.....No Effect
Brake Fluid.....No Effect	Transmission Fluid.....No Effect
Skydrol.....No Effect	10% Sulphuric Acid.....No Effect
10% Hydrochloric Acid.....No Effect	10% Acetic Acid.....No Effect
Xylene.....No Effect	MEK.....No Effect

**Please note that low air and/or concrete temperatures and/or relative humidity may alter drying times. Follow recommended coverage rates for best results.

APPROXIMATE COVERAGE RATES

Application Surface	First Coat	Optional Second Coat
New (unsealed) concrete	250-300 ft ²	250-300 ft ²

*Coverage rates vary depending upon surface porosity and texture, and application method. Excessive build up should be avoided.

**Please refer to application instructions for proper application of second coat.

SHELF LIFE

Imperial Poly 250 has a shelf life of up to one year in it's original, sealed, unopened container.

PACKAGING

Imperial Poly 250 is packaged in 1.25 gallon and 5 gallon kits.

SURFACE PREPARATION:

New Concrete: Acid etch evenly with a solution of 1 part commercial muriatic acid to 3 parts clean water (by volume) and rinse thoroughly with our **Balance** neutralizer, or a neutralizing solution of 1 cup ammonia to 5 gallons clean water to achieve a neutral substrate of 7 pH. Allow surface to dry completely prior to coating application. **Light shot blasting or diamond grinding is suggested for superior adhesion.**

Coated Concrete: An existing coating must be completely removed prior to applying new product or a thorough sanding or other mechanical grinding is highly recommended to prepare the surface if applying over an existing coating. After existing coating is removed or sanded and prepared a test area coat is highly recommended to test adhesion prior to entire application.

Substrate temperature must be no less than 55 degrees F and not exceed 80 degrees F. Avoid applying coating in high humidity/moisture atmospheres. If applied outside these limits the coating may not achieve adequate film formation and may have excessive air entrapment, bubbles, blushing or hazing.

MIXING: Mix exactly 4 parts of A to 1 part of B. Mix thoroughly to ensure uniform coating, color (if applicable) and thorough curing properties. No induction time is needed. Be sure to only mix enough material that can be applied within 45 minutes.

APPLICATION: It is recommended to apply this coating using a 3/8"-1/2" shed-free, phenolic core roller. Apply evenly at a rate of 250-300 square feet per gallon, always keeping a wet edge. Back rolling is necessary to achieve a uniform, roller mark free application. It is recommended to work in sections usually using control joints as dividers to ensure proper application results. Do not allow to puddle. Use a bristle brush to remove excess coating in joints. It is recommended to recoat within 24 hours of first coat (suggested recoat time approximately 10-12 hours in average application temperatures of 50% R.H. @ 72°F. If recoat time exceeds 24 hours, reduce the second coat adding 15% Acetone (approx. 1 pint Acetone to 1 mixed gallon of product) to achieve proper intercoat adhesion.

PLEASE NOTE: It is always recommended to test the product in a small, inconspicuous area (on the same concrete substrate) for desired results prior to application. Coverage rates may vary for all coatings and substrates depending on porosity, density, texture etc.

CLEAN-UP & PRODUCT REMOVAL

Use Xylene. Dispose of containers in accordance with local and federal regulations. Dried, cured urethane may be removed with a commercial stripper, but recommended removal is by way of mechanical means, including sanding, shot blasting, etc.

PRECAUTIONS AND LIMITATIONS

- **Poly 250** will not freeze during storage, however allow temperature to rise to a minimum 60°F prior to application.
- All HVAC ventillation ducts should be somehow blocked prior to application so solvents fumes are not distributed.
- Keep away from open flames. **Poly 250** is flammable and is very suseptable to ignition.
- It is not recommended to apply **Poly 250** over existing coatings due to inadequate adhesion.
- Coverage rates depend upon many conditions including application method, surface porosity, applicator, etc.
- **Poly 250** should be applied in medium to thin coats. Do not allow to puddle.
- **Poly 250** will be slippery when wet. Use *Kingdom Products' Grip-Fine*, anti-skid additive to reduce surface slip hazards.
- **Poly 250** contains harsh vapors. Adequete ventillation and proper respiratory protection is necessary.
- Do not apply **Poly 250** over wet or damp surfaces. Moisture tests may be necessary prior to application.
- **Poly 250** will darken the surface of many new and existing concrete slabs. Test prior to use.

SPECIAL NOTES

Please consult Safety Data Sheet (SDS) and Technical Data Sheets (TDS) and read Warranty information prior to use. **FOR PROFESSIONAL USE ONLY!** Always install a test area or job site mock up for owner approval of acceptable color, texture, finish adhesion and any other critical requirements prior to proceeding with the installation. Verify that the most current versions of the Technical Data Sheets (TDS) and installation guidelines are being utilized.

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