



HIGH PERFORMANCE ALIPHATIC POLYURETHANE FINISH COATING

GENERAL PRODUCT DESCRIPTION

PetraThane CRU S is a two component, high performance aliphatic polyester polyurethane finish floor coating. It is the satin version of PetraThane CRU and is the product of choice when a satin or mat finish is required. It is designed to be applied at 3-5 mils (DFT). For durability, stain resistance, and a finish coat which beautifies concrete for years, PetraThane CRU S is simply unmatched. It is also formulated to be used virtually with all other Petra base systems. Its design features provide for the highest demands. Advantages:

- VOC Compliant - (California 7-2006 standards, <100 grams/liter)
- Satin Finish
- Withstands medium to heavy traffic
- Chemical Resistant
- UV Stability
- Mar Resistant
- Color Stability

PRODUCT DATA

Volumetric Ratio: 2 to 1
 Solids: 74% by volume
 Coverage: 300 S/F per gal. over textured coat
 400 S/F per gal. over smooth coating
 Application Temperature: 50-90°F and 5° degrees above dew point
 Thinning: May add 1-2 pints of acetone per gal.
 Pot Life: 2 Hours
 Cure Time: 5-6 hours (walking)
 24 hours (traffic)
 Critical recoat time: 24 hours
 Shelf life: 1 year
 USDA Food and Beverage: Meets requirements

PACKAGING

PetraThane CRU S is available in three kit sizes:

	Part A	Part B
1 Gallon Kit	2/3 gallons	1/3 gallon
3 Gallon Kit	2 gallons	1 gallon
15 Gallon Kit	10 gallons	5 gallons

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Tear Resistance DleC	270 psi	ASTM D1004
Tensile Strength	3,980 psi	ASTM D 412
Ultimate Elongation	60%	ASTM D 412
Flammability	Flammable and Hazardous	ASTM D 635
Gloss (60 deg)	20%	ASTM D 523
Flash Point	>200°F	ASTM D 93
Porosity on unglazed finish		NACE Stand TM-01-74

INDUSTRIAL APPLICATIONS

The uniqueness and versatility of its chemistry allows PetraThane CRU S to be used in a wide variety of applications:

- Manufacturing
- Commercial buildings and walkways
- Restrooms
- Pharmaceutical
- Food Preparation
- Power Plants
- Electronic Plants
- Warehouses
- Aisle ways
- Clean rooms
- Automotive showrooms and service bays
- Schools

COLORS

PetraThane CRU S is available in clear only. Petra standard colors are available on a special order basis. Note: Generally, clear sealers look good on new concrete or concrete in good condition only. The discoloration, stains, and patches on older concrete show through clear sealers. When concrete is discolored, stained, and patched, it is best to apply a colored finish coat of PetraThane CRU, which is available in a variety of standard colors.

PETRA THANE CRU S

CONCRETE PREPARATION

Before the coating is applied, the concrete must be:

- Clean – Contaminants removed
- Profiled – Surface etched
- Sound – Cracks repaired

Mechanical methods are preferred for preparing concrete prior to coating application. Shot-blasting, diamond grinding, scarifying, and scabbling are all acceptable methods. The concrete profile should approximate 60-80 grit sandpaper after preparation.

PATCHING

Voids, cracks, and imperfections will be seen in finished coating if the concrete is not patched correctly. Patch concrete with Petra Patch. After the patching material has cured, diamond grind patch the concrete. If a non-Petra patching material is used, make sure that it is a two-part epoxy patch. Always test unproven products by applying patch material first, then Petra coating system next. Check to see if bonding is firm.

APPLICATION PROCESS

PetraThane CRU S is generally applied once as the final coat. For estimation purposes, use 300 S/F per gallon for textured finishes and 400 S/F per gallon over a smooth surface as coverage rates. Refer to other Petra data sheets for application of base systems that the PetraThane CRU S will be applied over.

1. It is always best to apply in descending temperatures especially for exterior applications. Optimum ambient temperature should be between 50-90°F during application.
2. Mix three gallons of resin using above mixing instructions.
3. To thin material, add 1 pint of acetone per gallon to PetraThane CRU S. This may be increased up to 1 quart as needed.
4. Apply PetraThane CRU S with a 3/8" non-shedding phenolic (plastic) core roller cover. Dip a 9" or 18" roller on a pole into bucket. Roll the PetraThane CRU S forward and backwards. Do not over roll because the material will tack up.

MIXING

The ratio of Petra Thane CRU S is 2 to 1. That is, two parts of A - resin, to one part of B - hardener. Generally, three mixed gallons is ideal for application. Mix the following with a drill and jiffler mixer.

1. Pre-mix part A for about 30 seconds. For the 3 and 15 gallon kits, pour out 2 gallons of part A into an empty 5 gallon bucket which then becomes the mixing bucket. The 1 gallon kit is short-filled meaning that the part A has enough space for the part B to be added.
2. Add one gallon of part B and mix for 2 minutes until homogeneous. Be careful to scrape sides of bucket to insure that no unmixed material remains. The 1 gallon kit requires only that the pre-measured part B be poured into the short-fill part A container.

PRODUCT LIMITATION

Ground level concrete slabs emit moisture vapor. The allowable moisture emissions for concrete is 3 lbs. 1000 S/F over a twenty-four hour period. If moisture is above this level, then blistering and delamination of coating may occur. A calcium chloride test should be performed to determine concrete moisture level. If moisture levels exceed the 3 lb. limit, a concrete moisture vapor control system should be used first before applying coating system. Please contact Petra technical department for approved systems.

Coating systems are susceptible to cracking if the concrete moves or separates below the coating. Hence, joint and crack treatment should be reviewed prior to coating application. As a general rule, control joints (saw cuts) and random cracks should be saw cut or chased first then filled with Petra Patch or similar approved hard epoxy product. Construction joints (two slabs which meet and hence move) should be treated. After the coating has been applied and cured, saw cut through the coating over construction joints.

CLEANUP

PetraThane CRU S while in an unreacted state may be cleaned up with acetone.

WARRANTY

Petra Polymers products are warranted for one year after date of application. Please refer to the Petra Polymer's Limited Material Warranty for additional clarification.

SAFETY

Consult PetraThane CRU S material safety data sheet. Avoid PetraThane CRU S contact with eyes and skin. Some individuals may be allergic to epoxy. Protective gloves and clothing are recommended.

Information expressed in this data sheet is correct to the best of our knowledge. The technical data sheet does not constitute a warranty, expressed or implied as to the performance of this product. The use and application of this product is beyond our control. Warranty and liability therefore is limited to the replacement only for defective materials. Technical information is subjected to change without cause.

