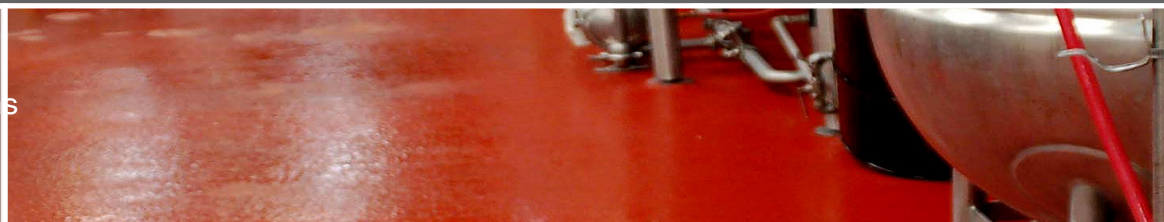


PETRACRETE U

advanced coating systems



POLYURETHANE CONCRETE SLURRY S

GENERAL PRODUCT DESCRIPTION

PetraCrete U SL is a hybrid, three component polyurethane-concrete floor system. Its unique formulation makes it ideal for many harsh environmental conditions. It is especially suited to handle high temperature sanitary wash down and steam where thermal cycling is present. In addition, PetraCrete U SL has excellent chemical resistance. It is generally applied between 1/8" and 3/8". PetraCrete U SL is USDA approved for use in federally inspected food facilities. Advantages:

- Resistant to thermal shock
- -50 to 250 degrees F temperature range
- Ideal for CIP (Cleaning-In-Place) applications
- Handles severe impact conditions
- Anti-slip surface
- Seamless flooring system
- Essentially odorless
- Withstands heavy forklift traffic
- Chemical resistant
- Abrasion resistant

INDUSTRIAL APPLICATIONS

- Beverage Plants
- Dairies
- Food Processing
- Freezers and Cold Storage
- Meat Packing and Poultry
- Fryer Lines
- Chemical and Secondary Containment
- Commercial Kitchens
- Bakeries
- Pharmaceutical

PRODUCT DATA

Volumetric Ratio: 1A, 1B, 1C
 Coverage: 60 Sq. Ft. per 2 gallon mix A 1/8
 V.O.C. 0
 Application Temperature: 65-90°F and 5° above the dew point
 Thinning: Not required
 Pot Life: 15 minutes
 Time to mix batches: 20 minutes
 Cure Time @ 75°F: 4-6 hours (walking)
 12-16 hours (traffic)
 Shelf life: 6 months
 USDA Food and Beverage: Meets requirements

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	8,200 psi	ASTM C 579
Flexural Strength	2,915 psi	ASTM C 580
Tensile Strength	1010 psi	ASTM D 307
Bond to Concrete	350 psi concrete fails at this point	ASTM D 4541
Coefficient of Thermal Expansion	< 12.6 X 10	ASTM C531
Water Absorption	.10% maximum	ASTM D 413
Linear Shrinkage	.20% maximum	ASTM C 531
Impact Resistance	16 ft. lb. - no failure	Mil-D-3134H
Anti-Microbial	Passes	G-21
Coefficient of Friction	Passes	ASTM D 2047
Modulus of Elasticity	1.8 X 10	ASTM C 580

CHEMICAL RESISTANCE

Acetic Acid 30%	R	Hydrochloric Acid 37%	R
Ethanol	R	Nitric Acid 30%	SS
Alcohol, Isopropyl	SS	Phosphoric Acid	SS
Aluminum Hydroxide	R	Skydrol R	R
Citric Acid	R	Sodium Bisulfate	R
Copper Chloride	R	Sodium Chloride	R
Diesel	R	Sodium Hydroxide 50%	R
Ferric Acid	R	Sulfuric Acid 50%	R

Note: The above guide is based on seven days exposure of the listed chemical at 72 degrees F (22 degrees C)
 Key: R = Recommended, SS = Splash and Spill, NR = Not Recommended. Above chart serves as a guideline only. Samples will be furnished upon request for testing.

PETRACRETE U SL

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.

MIXING

Volume mix ratio of PetraCrete U SL resin is always 1-A to 1-B. Part C is needed but the ratio will vary slightly depending on the use.

For a slurry broadcast mix use 1-gal. of A, 1-gal. of B and a 38 pound bag of SL part C (38 lbs) .

For a top coat mix use 1 gal. of part A, one gal. of part B and a 12 pound bag of top coat part C (12 lbs).

For a cove mix use one quart of A, one quart of B and one quart of part top coat C. Prime the surface with this blend before adding sand. then. To this liquid mix add 30 mesh silica sand to the proper consistency, about three quarts. This mix should make a nice clump in a gloved hand and when released, leave only a little sand on the glove. This mix should run about 18 feet of 6" tall X 3/8" cove

Mix the following with a drill and jiffy mixer.

1. In an empty five gallon bucket, pour 1 gallon of Part A and 1 gallon of Part B. If pigment is on the side, add 4 oz. of pigment. Mix with jiffy mixer for 30-45 seconds.
2. Immediately mix in the correct amount of part C and mix with jiffy mixer another 30-45 seconds or until thoroughly mixed.
3. Immediately apply to floor.

Note: PetraCrete U SL is a fast reacting system. Applicators need to work quickly once a batch is mixed all the way to the end of the broadcast step to insure good leveling and acceptance of aggregate.

APPLICATION PROCESS

PetraCrete U SL is best applied with a screed rake gauge or trowel. After mixing, immediately dump all of the material out of the bucket and onto the properly prepared concrete.

1. Trowel out to the desired thickness (usually 3/16" to 1/4") and finish.
2. For a smoother and more even finish use a 3/8" nap non shedding roller and roll over the freshly troweled surface.
3. Slurry broadcast (3/16" -1/4") : Apply the mixed material with a screed rake set to 200mils, 5 MM or the height of a stack of three quarters. This should result in coverage of about 40 square feet per kit. Roll the entire floor with a spiked roller to deair and help level any lines. Then immediately broadcast 20-30 mesh sand to refusal. The working time is short so you must move quickly.
4. Allow to cure for 24 hours and apply PetraCrete U TC.

APPLICATION PROCESS (CONTINUED)

Notes: The amount of anti-slip surface can be varied by using larger or smaller aggregate in the final broadcast coat.

TOP COAT MIX

PetraCrete U SL has a standard mix ratio of one gallon. of part A, one gallon of part B and one 12-pound bag of part C. This is a low viscosity mix and is typically applied at 100 square feet per gallon with a squeegee and a 3/8" nap roller.

For estimating purposes use ~7 gallons of resin per 100 square feet for a 1/4" thick trowel down system depending on substrate condition.

COLOR SELECTION

PetraCrete U SL is available in the following colors: Gray, Tile Red, Green, Blue and Tan. Other colors are available at an additional charge.

PACKAGING

PetraCrete U SL is available in a 10 Gallon kit size:

	Part A	Part B	Part C
2 Gallon Kit	1 gal.	1 gal.	1 Bag *
10 Gallon Kit	5 gal.	5 gal.	5 Bags *

* Each Part C bag weighs 38 pounds

CLEANUP

PetraCrete U SL while in a liquid state may be cleaned up with water and degreaser. Otherwise a strong solvent may be required while PetraCrete U SL is setting up.

WARRANTY

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

SAFETY

Consult PetraCrete U SL material safety data sheet. Avoid PetraCrete U SL contact with skin. Some individuals may be allergic to epoxy.



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.

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