PETRACHIP SEALER
advanced coating systems

CLEAR TWO COMPONENT CYCLOALIPHATIC SEAL

GENERAL PRODUCT DESCRIPTION

PetraChip Sealer is a high build, decorative, clear finish for PetraChip Systems. It is a two component, high performance, cycloaliphatic epoxy, providing a durable, high gloss finish for Petra hip systems which result in a beautiful look which lasts for years. It is designed to be used in conjunction with Petra Chip Basecoat (see data sheet). Its epoxy chemistry provides excellent bonding characteristics. It is generally applied at a rate of 100 S/F per gallon (16 mils). Its design features provide for the highest demands. Advantages:

- High gloss
- Beautiful flooring systems
- Seamless
- Integral cove base available
- Texture increases anti-slip properties
- Odorless
- VOC Compliant - 100% Solids
- Withstands medium to heavy traffic
- Chemical resistant
- No amine blush
- Can be applied over ten day old concrete

PRODUCT DATA

Volumetric Ratio:	2 to 1
Solids:	100%
Coverage:	100 S/F per gal. at 16 mils
	135 S/F per gal. at 12 mils
Application Temperature:	65-90°F and 5° above the dew point
Thinning:	Not required
Pot Life:	15-20 minutes
Working time on floor:	20-30 minutes
Cure Time:	10 hours (walking)
	24 hours (traffic)
Critical recoat time:	24 hours
Shelf life:	12 months
USDA Food and Beverage:	Meets requirements

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	8,880 psi	ASTM C 579
Flexural Strength	8,100 psi	ASTM D 790
Tensile Strength	5,700 psi	ASTM D 638
Bond to Concrete	350 psi concrete fails at this point	ASTM D 4541
Coefficient of Friction	0.6 minimum	ASTM D 2047
Taber Abrasion	37 mgs	ASTM D 4060 CS 17 Wheels
Flammability	Self-extinguishing	ASTM D 635
Hardness, Shore D	84	ASTM D 2240
Flash Point	>200°F	ASTM D 93

INDUSTRIAL APPLICATIONS

The uniqueness and universality of its chemistry allows Petra Chip to be used in the following applications:

- Manufacturing
- Aerospace
- Food Preparation
- Power Plants
- Electronic Plants
- Warehouses
- Aisle ways
- Clean rooms
- Automotive
- Laboratories
- Retail
- Kitchens
- Restrooms
- Dairies
- Pharmaceutical
- Laundry Floors
- Loading Docks
- Schools

COLORS

Petra Chip Sealer is clear.

PETRACHIP SEALER

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.

MIXING

The ratio of PetraChip Sealer 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. Part A does not require pre-mixing. If using the 15 gallon kit, pour out 2 gallons into an empty 5 gallon bucket which then becomes the mixing bucket. (The three gallon kit allows the Part A bucket to be used as the complete mixing bucket, since the Part A comes in a three and a half gallon bucket.)
2. Add one gallon of part B and mix for 60-90 seconds.
3. Immediately apply to the floor. PetraChip Sealer in mass has a short pot life of approximately 15-20 minutes. Once poured out on the floor, 20-30 minutes of working time can generally be expected.

APPLICATION PROCESS

PetraChip Sealer can be applied in a single coat or in two coats for a more even texture. For estimation, use 135 S/F (12 mils) to 100 S/F (16 mils) as a coverage rate. The following is for a 16 mil system:

1. Always apply in descending temperatures. Concrete is porous and traps air. In ascending temperatures (generally mornings), the air expands and can cause out gassing in the coating. It is safer to apply coatings in the late afternoon, especially for exterior applications. Optimum ambient temperature should be between 65-90°F during application.
2. Mix three gallons of resin using above mixing instructions.
3. Apply approximately 200 S/F per gallon for a two coat application or 100 S/F for a single coat. Apply by immediately pouring out on surface in a ribbon, while walking and pouring at the same time until the bucket is empty.
4. Using a window squeegee on a pole, pull PetraChip Sealer over PetraChip Basecoat.
5. Using a 3/8" non-shedding phenolic (plastic) core paint roller, roll coating forwards and backwards.

APPLICATION PROCESS (CONTINUED)

6. Lastly, backroll in the opposite direction from step 5.
7. Apply second coat by repeating steps 1-6 the next day if applying two coats.
8. An optional urethane finish coat may be applied last.

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.

PACKAGING

PetraChip Sealer is available in two different kit sizes:

	Part A	Part B
3 Gallon Kit	2 gal.	1 gal.
15 Gallon Kit	10 gal.	5 gal.

CLEANUP

PetraChip Sealer, while in an unreacted state, may be cleaned up with water and degreaser. Isopropyl alcohol or acetone may be needed once the resin begins hardening. Lastly, a stronger solvent may be required if the resin is nearly set up.

WARRANTY

Petra Industrial 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 PetraChip Sealer material safety data sheet. Avoid PetraChip Sealer contact with skin. Some individuals may be allergic to epoxy.