



PETRACHIP BASECOAT

advanced coating systems



HIGH PERFORMANCE TWO COMPONENT CYCLOALIPHATIC EPOXY

GENERAL PRODUCT DESCRIPTION

PetraChip Basecoat is a two component, high performance, cycloaliphatic epoxy decorative concrete floor basecoat. Its epoxy chemistry provides excellent bonding characteristics. It is generally applied at 150 S/F per gallon (10.67 mils) as the basecoat for a PetraChip system. It can also be applied over a sanded CoreKote HB or other high build system at 16 mils. Its design features provide for the highest industrial demands. Advantages:

- Essentially odorless
- Self-priming
- VOC Compliant - 100% Solids
- High color stability in an epoxy
- High gloss
- Withstands medium traffic as a thin mil
- Chemical resistant
- Able to be applied over damp concrete
- 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	8,560 psi	ASTM C 579
Flexural Strength	7,800 psi	ASTM D 790
Tensile Strength	5,100 psi	ASTM D 638
Bond to Concrete	350 psi concrete fails at this point	ASTM D 4541
Taber Abrasion	101 mgs	ASTM D 4060 CS 17 Wheels
Coefficient of Friction	0.6 minimum	ASTM D 2047
Flammability	Self-extinguishing	ASTM D 635
Hardness, Shore D	84	ASTM D 2240
Flash Point	>200°F	ASTM D 93
Porosity on un-glazed finish	00	NACE Stand TM-01-74

INDUSTRIAL APPLICATIONS

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

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

COLORS

Standard PetraChip Basecoat colors are white, black, light gray, medium gray, dark gray, light brown, sand beige, dark beige, light beige, pastel blue, and tile red. Other colors are available through custom orders.

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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 Basecoat 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 Basecoat 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 Basecoat is generally applied in one coat at 150 S/F per gallon (10.67 mils) and at 100 S/F per gallon (16 mils) over a sanded Core Kote HB system. For estimation purposes, use 100 S/F per gallon in either case.

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 150 S/F per gallon (100 S/F per gallon for a top coat over a sanded CoreKote HB system) by immediately pouring out on surface in a ribbon, while walking and pouring.
4. Using a window squeegee on a pole, pull PetraChip Basecoat evenly over substrate.
5. Using a 3/8" non-shedding phenolic (plastic) core paint roller, roll coating forwards and backwards.
6. Lastly, backroll in the opposite direction from step 5.

APPLICATION PROCESS (CONTINUED)

7. Within ten minutes of application of PetraChip Basecoat, broadcast PetraChips (vinyl acrylic chips) at a rate of 16 lbs. per 100 S/F by tossing the chips into the air, allowing them to gently rain down into the wet PetraChip Basecoat. (Note: for a random broadcast, use 1 lb. per 100 S/F.)
8. Allow to cure, then scrape the basecoat with a firm drywall scraper in all directions.
9. Sweep and vacuum removing small pieces and dust.
10. Apply PetraChip Sealer. (refer to data sheet)

Refer to the PetraChip Systems Guide for additional information.

PACKAGING

PetraChip Basecoat is available in two different kit sizes:

	<u>Part A</u>	<u>Part B</u>
3 Gallon Kit	2 gal.	1 gal.
15 Gallon Kit	10 gal.	5 gal.

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

PetraChip Basecoat, 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 Basecoat material safety data sheet. Avoid PetraChip Basecoat 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.

