



PETRA GROUT

advanced coating systems



HIGH PERFORMANCE EPOXY MASTIC LEVELING MATERIAL

GENERAL PRODUCT DESCRIPTION

PetraGrout is a two component epoxy grout material. It is ideal for repairing larger eroded holes in concrete. PetraGrout takes over where Petra Patch leaves off for small repairs. Because of its extreme physical properties and high load-bearing strength, it is an ideal base for other Petra High Build systems. PetraGrout is also the right choice when sloping a floor. It can be applied from 1/16" to several feet thick by extending it with silica and aggregate. Its design features provide for the highest industrial demands. Advantages:

- 100% Solids , V.O.C. Compliant
- Essentially odorless
- Four times harder than standard concrete
- Withstands heavy forklift traffic
- Chemical resistant
- Able to be applied over damp concrete
- Can be applied over ten day old concrete

PRODUCT DATA

Volumetric Ratio:	2 to 1
Solids:	95%
V.O.C.	< 50 g/l - 0.4 lb. / gal.
Coverage:	300-400 S/F per gal.
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:	6-8 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	22,200 psi	ASTM C 579
Flexural Strength	13,900 psi	ASTM D 790
Tensile Strength	8,600 psi	ASTM D 307
Bond to Concrete	350 psi concrete fails at this point	ASTM D 4541
Taber Abrasion	Loss/1000 Cycles = 58 mg	ASTM D 4060 CS 17 Wheels
Water Absorption	.10% maximum	ASTM D 413
Linear Shrinkage	.12% maximum	ASTM C 531
Flammability	Self Extinguishing	ASTM D 635
Impact Resistance	16 ft. lb. - no failure	Mil-D-3134H
Coefficient of Friction	.6 minimum	ASTM D 2047
Hardness, Shore D	90	ASTM D 2240
Porosity on unglazed finish	00	NACE Stand TM-01-74

PACKAGING

Petra Grout is available in three different kit sizes:

	Part A	Part B
3.5 Gallon Kit	2.5 gal.	1 gal.
14 Gallon Kit	2x5 gal.	4 gal.
70 Gallon Kit	50 gal.	20 gal.

APPLICATIONS

- Repair larger holes in eroded concrete
- Sloping floors
- Ramps
- Machinery and pump bases
- Curbs
- Berms

CONCRETE PREPARATION

Before the coating is applied, the concrete must be:
 Clean-- Contaminants removed
 Profiled-- Surface etched
 Sound--Cracks repaired

Mechanical preparation is the preferred method of preparing concrete for coating application. Shot-blasting, diamond grinding, scarifying, and scabbling are all acceptable methods. The concrete profile should be approximately 40-60 grit sandpaper after preparation.

MIXING

The ratio of PetraGrout is 2.5 to 1. That is, two and a half parts of A - resin, to one part of B - hardener. Mix the following with a drill and jiffler mixer. For small projects, start with mixing up 3/4 of a gallon (108 fluid oz.), approximately 1/2 cubic foot:

1. Pour 77 oz. of part A in a five gallon bucket..
2. Add 31 oz. of part B and mix for 30 seconds.
3. Mix in slowly approximately 45-50 lbs. of 20 mesh silica for thicknesses less than 1/2". For applications over 1/2" thick, use 25 lbs. of 20 mesh silica and 25 lbs. of pea gravel. These formula's are starting points and should be adjusted for temperature

APPLICATION PROCESS

PRIME COAT:

1. Mix PetraGrout as detailed under "Mixing" but without the aggregate.
2. Prime the concrete at a rate of approximately 200-300 S/F per gallon.

APPLY PETRA GROUT WITH AGGREGATE:

1. Petra Grout can be applied while the prime coat is still wet.
2. Dump bucket of Petra Grout in area to be grouted and begin applying and finishing with a trowel.
3. Petra Grout may also be screeded.

SEAL COAT:

1. Apply Core-Kote OP at a rate of 200 S/F with the edge of a trowel to seal the Petra Grout. Or to make a seal coat out of Petra Grout:
2. Mix Petra Grout as detailed under "Mixing" but without the aggregate. Add about 1/2 gallon of Aerosil 200 or Cabosil M5

CLEANUP

PetraGrout, 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.

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 PetraGrout material safety data sheet. Avoid PetraGrout contact with skin. Some individuals may be allergic to epoxy.