



PRODUCT TECHNICAL DATA SHEET

EPOXY GROUT

Advanced Coating Systems

HIGH PERFORMANCE EPOXY MORTAR

GENERAL PRODUCT DESCRIPTION

Epoxy Grout is a two component, 100% solids epoxy. It is ideal for repairing larger eroded holes and cracks in concrete. Epoxy Grout takes over where the Epoxy Patch Kit leaves off for small repairs. Because of its extreme physical properties and high load-bearing strength, it is an ideal base for other ONYX Build systems. Epoxy Grout 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 selected aggregate, such as pea gravel.

ADVANTAGES:

- 100% Solids , V.o.c. = 0
- Essentially Odorless
- 4 Times Harder than Standard Concrete
- Withstands Heavy Forklift Traffic
- Chemical Resistant
- Applied Over Damp Concrete
- Can be Applied Over 10 Day Old Concrete
- Rapid Return to Service

PRODUCT DATA

Volumetric Ratio:	2.5 to 1
Solids:	100 %
V.o.c.	0 G/L - 0.0 Lb. / Gal.
Approximate Coverage:	1600 Sq Ft per Gallon. @1 Mil.
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

Cure time, pot life, and working time are based on a slab temperature of 70-75 F°, and will change accordingly as temperature changes.

APPLICATIONS

- Repair Larger Holes in Eroded Concrete
- Sloping Floors
- Ramps
- Machinery and Pump Bases
- Curbs
- Berms

PACKAGING

Petra Grout is available in 3 different kit sizes:

	Part A	Part B
3.5 Gallon Kit	2.5 gal.	1 gal.
14 Gallon Kit	2 x 5 gal.	4 gal.
70 Gallon Kit	50 gal.	20 gal.

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

SURFACE PREPARATION

Before the coating is applied, the concrete must be:

- Clean — Contaminants removed
- Profiled — Surface mechanically prepared
- Sound — Cracks repaired

Mechanical methods are required for preparing concrete prior to coating application. Shot-blasting, diamond grinding, scarifying, and scabbling are all acceptable methods. The concrete profile should be approximately a CSP 4 or higher.

MIXING

The mix ratio of Epoxy Grout is 2.5 to 1. That is, 2 and a half parts of A - resin, to 1 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. Premix Part A for 45-60 seconds until uniform. Pour 77 oz. of Part A in a mixing bucket.
2. Add 31 oz. of Part B and mix for 2 minutes.
3. Slowly mix in 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 formulas are starting points and should be adjusted for local conditions. ONYX recommends doing a test sample to ensure quality control.
4. For Spackle Mix (small cracks and divots), mix smaller amounts of A and B (10 oz./4 oz.), then start adding fumed silica about 10-20 oz. (all by volume). Mix into the resin to produce a thick creamy liquid or add more to produce a peanut butter like consistency.

APPLICATION PROCESS

PRIME COAT:

1. Epoxy Grout should only be installed over an epoxy primed surface first. The Epoxy Grout may be used as the primer if mixed properly without aggregate. ONYX also carries multiple primers.
2. Prime the concrete with the neat resin at a rate of approximately 200-300 Sq Ft per gallon.

APPLY EPOXY GROUT WITH AGGREGATE:

1. Epoxy Grout can be applied while the prime coat is still wet.
2. Dump bucket of Epoxy Grout in the area to be grouted and begin applying and finishing with a trowel.
3. Epoxy Grout may also be screeded.
4. Epoxy Grout with aggregate is a porous mix and should therefore receive a grout coat.

APPLY EPOXY GROUT SPACKLE MIX:

1. Apply Spackle Mix with a putty knife, dry wall knife or trowel.
2. Push the material firmly into voids to insure proper bonding.
3. For best results, sand or grind flush when cured prior to topcoating.

GROUT/SEAL COAT:

1. For a grout coat, apply a neat coat of resin at 200 Sq Ft per gallon with the edge of a steel trowel to seal the Epoxy Grout. Use either the Epoxy Grout in liquid form (adding no aggregate), Build Coat, or Build Coat Fast. This liquid will penetrate and fill in the voids and pores.
2. For a seal coat, add about 1/2 gallon (by volume) of Konasil to Epoxy Top Coat or Epoxy Top Coat Fast to create a higher viscosity resin. It is recommended to apply this over the preexisting grout coat. The Konasil may leave an orange peel texture.

COLOR SELECTION

Epoxy grout comes in the "color-of-the-day" and is not selectable. If you need a particular color contact your ONYX representative when placing your order. There may be an added cost for specifying a color.

CLEANUP

Epoxy Grout, 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

ONYX Concrete Coatings products are warranted for 1 year after date of manufacture. Please refer to the ONYX Limited Material Warranty for additional clarification. Refer to the ONYX General Product Limitation Guidelines.

SAFETY

Consult Epoxy Grout safety data sheet. Avoid Epoxy Grout contact with eyes and skin. Some individuals may be allergic to epoxy. Always wear protective eyewear, clothing, and gloves. Safety always comes first.

MAINTENANCE

Refer to the ONYX Maintenance and Cleaning Guidelines.

PRODUCT LIMITATIONS

Always read the ONYX PRODUCT LIMITATION GUIDELINES prior to installation.