



PRODUCT TECHNICAL DATA SHEET

EPOXY PRIME BASE

Advanced Coating Systems

TWO-COMPONENT DEEP PENETRATING EPOXY PRIMER

GENERAL PRODUCT DESCRIPTION

Epoxy Prime Base is a two-component, deep penetrating Epoxy Prime Base which provides an excellent bond coat between the concrete substrate and other ONYX high performance coating systems. Its epoxy chemistry provides excellent bonding characteristics, and its low viscosity allows for deep penetration into a concrete substrate. Because of the porous nature of concrete, Epoxy Prime Base reduces problems associated with outgassing in many coating systems. Epoxy Prime Base is generally applied 2 different ways. Used as a primer, applied tight at 300-400 Sq Ft per gallon. Epoxy Prime Base is generally applied in 2 ways: 1. As a primer for epoxy, polyurethane, and polyaspartic coating systems (thin mils, broadcast, trowel-down, etc.) at 350-400 Sq Ft per gallon. 2. As a base coat to build thickness and or broadcast vinyl chips, silica, sand or other aggregates. The coverage rate will vary from 50-250 Sq Ft per gallon depending on the particular application.

ADVANTAGES

- Low Odor
- Scaqmd Compliant - 49 G/L Voc
- Chemical Resistant
- Able to be Applied Over Damp Concrete
- No Amine Blush
- Low Viscosity- Penetrating
- Can be Applied Over 10 Day Old Concrete

PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Compressive Strength	18,400 psi	ASTM C 579
Flexural Strength	9,110 psi	ASTM D 790
Tensile Strength	5,190 psi	ASTM D 638
Bond to Concrete	350 psi concrete fails at this point	ASTM D 4541
Taber Abrasion	67 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

PRODUCT DATA

Volumetric Ratio:	2 to 1
Solids:	95%
V.o.c.	< 50 G/L - 0.4 Lb. / Gal.
Approximate Coverage:	150-400 Sq Ft per Gallon
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.

PACKAGING

Epoxy Prime Base 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.

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 a minimum of a CSP 2.

MIXING

The ratio of Epoxy Prime Base is 2 to 1. That is, 2 parts of A (resin), to 1 part of B (hardener). Generally, 3 mixed gallons is ideal for application. Mix the following with a drill and jiffler mixer.

1. Pre-mix the Part A for 45-60 seconds until uniform. If using the 15 gallon kit, pour out 2 gallons of Part A into an empty, clean mixing bucket. (The 3-gallon kit allows the Part A bucket to be used as the mixing bucket, since the Part A comes in a three and a half gallon bucket.)
2. Add 1 gallon of Part B and mix for 2 minutes.
3. Immediately apply to the floor. Epoxy Prime Base in mass has a short pot life. Once poured out onto the floor, 20-30 minutes of working time can generally be expected.

APPLICATION PROCESS

Epoxy Prime Base is typically applied in 1 coat. For estimation purposes, use 300 to 400 Sq Ft per gallon as a coverage rate. (Note: For concrete that has been extensively prepared, a much lower coverage rate can be expected. Testing may be required to determine coverage.)

1. Always apply in descending temperatures. Concrete is porous and traps air. In ascending temperatures (generally mornings), the air expands and can cause outgassing 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 3 gallons of resin using above mixing instructions.
3. Apply approximately 300 to 400 Sq Ft per gallon by immediately pouring out on the surface in a ribbon, while walking and pouring at the same time until bucket is empty.
4. Using a window squeegee on a pole, pull Epoxy Prime Base over substrate. Pull resin as thin as possible while still wetting out concrete and uniformly covering surface. This allows trapped air to escape more easily.
5. Using a 3/8", non-shedding phenolic (plastic) core paint roller, roll the coating forwards and backwards.
6. Lastly, backroll in the opposite direction from step 5.

PRODUCT LIMITATIONS

Always read ONYX PRODUCT LIMITATION GUIDELINES document prior to installation as the content below is only partial information.

Ground level concrete slabs emit moisture vapor. The allowable vapor emissions for concrete is 3 lbs. per 1,000 Sq Ft over a 24 hour period. If vapor is above this level, then blistering and delamination of the coating may occur. A calcium chloride test, in accordance with ASTM F1869 Standards, should be performed to determine the concrete vapor level. If the vapor levels exceed the 3 lb. limit, a concrete vapor control system should be used before applying any coating system. Please contact the ONYX 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 the coating application. As a general rule, control joints (saw cuts) and random cracks should be saw cut or chased first, then filled with the appropriate patch material. 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

Epoxy Prime Base, 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 products are warranted for 1 year after date of manufacture. Please refer to the ONYX Concrete Coating's Limited Material Warranty for addition clarification.

SAFETY

Consult Epoxy Prime Base safety data sheet. Avoid Epoxy Prime Base contact with skin. Some individuals may be allergic to epoxy resin. Protective gloves and clothing are recommended. This product contains petroleum distillates. Use with adequate ventilation. Always wear protective eyewear, clothing, and gloves. Safety always comes first.

MAINTENANCE

Refer to the ONYX Maintenance and Cleaning Guidelines.