



PRODUCT TECHNICAL DATA SHEET

EPOXY PRIME BASE FAST Advanced Coating Systems

TWO-COMPONENT DEEP PENETRATING EPOXY PRIMER

GENERAL PRODUCT DESCRIPTION

Epoxy Prime Base Fast is a two-component, deep penetrating epoxy primer which provides an excellent bond coat between the concrete substrate and other ONYX high performance coating systems. Epoxy Prime Base Fast has a cure time that is about half (4 hours) of our standard Epoxy Prime Base. 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 Fast reduces problems associated with outgassing with many coating systems. Epoxy Prime Base Fast 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

- Fast Cure
- 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: | 300-400 Sq Ft per Gallon. |
| Application Temperature: | 65-90°F and 5° Above the Dew Point |
| Thinning: | Not Required |
| Pot Life: | 10-15 Minutes |
| Working Time On Floor: | 15-20 Minutes |
| Cure Time: | 3-5 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 Fast is available in 2 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 Fast 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 three-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.) Use empty, clean buckets when making smaller batches.
2. Add 1 gallon of Part B and mix for 2 minutes.
3. Immediately apply onto the floor. Epoxy Prime Base Fast in mass has a short pot life. Once poured out on the floor, 15-20 minutes of working time can generally be expected.

APPLICATION PROCESS

Epoxy Prime Base Fast 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 by immediately pouring out on 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 Fast over substrate. If using as a primer, on a thin mil coating, pull resin as thin as possible while still wetting out the 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 (2 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 Fast, 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. Refer to the ONYX General Product Limitation Guidelines.

SAFETY

Consult Epoxy Prime Base Fast safety data sheet. Avoid Epoxy Prime Base Fast contact with eyes and 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.