

DESCRIPTION

PolySpec 100EX is a high solids, moisture tolerant, penetrating epoxy primer used to prime concrete surfaces for high performance applications. It is commonly utilized as part of a complete TuffRez flooring system and is also suited for use with epoxy novolac lining systems.

TYPICAL APPLICATION

| | |
|------------|---|
| • Primer | PolySpec 100EX Primer @ 175–200 ft ² /gallon |
| • Overcoat | Flooring or Lining System from PolySpec |

PERFORMANCE DATA

Bond Strength (ASTM D-4541) concrete failure; >350 psi
VOC 0.0 lb/gal; 0.0 gm/L
Volume Solids 98%

STORAGE & INSTALLATION

Storage Environment Dry area, 65–80°F
Application Temperature, ambient 50–95°F
Application Temperature, substrate Minimum 5°F above dew point
Shelf Life 1 year
Pot Life, @ 77°F 60 minutes
Set Time, @ 77°F 4–6 hours

Material cures more slowly at cooler temperatures, and working time will be substantially reduced at higher temperatures. In hot weather, material should be cooled to 65°F to 80°F prior to mixing and application to improve workability and avoid shortened pot life. The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

CONSIDERATIONS & LIMITATIONS

1. PolySpec does not recommend that grit be broadcast or otherwise introduced into PolySpec 100EX Primer. If enhanced slip resistance is desired, the flooring systems' body coat or topcoat may be specified to serve this function.
2. This product is not designed for exterior use, immersion, or any use where moisture can reach the underside of the flooring.
3. This product is not designed to provide complete hide and color coverage. If complete hide is required, use additional TuffRez topcoats.
4. Floors should be sloped to drain to prevent standing water or chemicals. As with any surface, all spills should be removed as soon as possible to prevent a slipping hazard.
5. Do not thin with solvents unless advised to do so by PolySpec.
6. Confirm product performance in specific chemical environment prior to use.
7. Prepare substrate according to "Surface Preparation" portion of this document.
8. Do not apply to slabs on grade unless a heavy unruptured vapor barrier has been installed under the slab.
9. Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.
10. For industrial/commercial use. Installation by trained personnel only.

PolySpec[®] 100EX

TECHNICAL DATA SHEET

Epoxy Primer for Concrete

BENEFITS

- High solids formulation eliminates solvent odors
- Low viscosity formulation penetrates and seals concrete pores
- Provides superior adhesion to concrete and higher tensile and flexural strengths when compared to conventional polyamide primers
- Cures at ambient temperatures down to 50°F
- Resistant to amine blush, even when cured at low temperatures and high humidity
- Requires zero induction time

RECOMMENDED USES

- Concrete primer, as part of a complete TuffRez[®] flooring system
- Concrete primer, as part of a complete epoxy novolac lining system
- Enclosed and occupied spaces

GENERIC DESCRIPTION

Primer

STANDARD COLORS

Amber

PACKAGING

3-Gallon Unit

COVERAGE

175–200 ft²/gallon

May vary depending on concrete porosity

SURFACE PREPARATION

Concrete: Apply only to clean, dry and sound concrete substrates that are free of all coatings, sealers, curing compounds, oils, greases or any other contaminants.

- *New concrete should be cured a minimum of 28 days.*
- *Concrete that has been contaminated with chemicals or other foreign matter must be neutralized or removed.*
- *Remove any laitance or weak surface layers.*
- *Concrete should have a minimum surface tensile strength of at least 300 PSI per ASTM D-4541.*
- *Surface profile shall be CSP-3 to CSP-5 meeting ICRI (International Concrete Repair Institute) standard guideline #03732 for coating concrete, producing a profile equal to 60-grit sandpaper or coarser. Prepare surface by mechanical means to achieve this desired profile.*
- *Moisture vapor transmission should be 3 pounds or less per 1,000 square feet over a 24 hour time period, as confirmed through a calcium chloride test, as per ASTM E-1907. Quantitative relative humidity (RH) testing, ASTM F-2170, should confirm concrete RH results <75%.*
- *All surface irregularities, cracks, expansion joints and control joints should be properly addressed prior to application.*
- *Outgassing may occur due to the porosity of some concrete surfaces. To reduce the effect of outgassing, the primer and coating should be applied when the temperature of the concrete substrate is dropping. This usually occurs in the evening; however, the concrete substrate temperature should be measured with a surface thermometer for verification. Double priming will greatly reduce the effects of outgassing by additionally filling the pores in the concrete.*

Refer to PolySpec Surface Preparation Guidelines for more details.

INSTALLATION STEPS

1. Component A Resin should be premixed prior to using due to possible additive separation.
2. Pour Component B Hardener into the Component A Resin pail and mix for a minimum of two minutes, using a mechanical jiffy-type mixer operated at low speed. Scrape the side of the pail to ensure the entire product has been properly mixed; any unmixed material left on the side of the pail will not cure.
3. Apply resin/hardener mixture by roller or squeegee. Move quickly and empty contents of pail onto surface as soon as possible to provide maximum working time. Material left in the pail will generate heat and have a reduced pot life.
NOTE: Do not turn the pail upside down and allow to drain onto substrate.
4. Follow squeegee application with a back-roll using a short nap roller.
5. *OPTIONAL STEP:* Once primer has become tacky to the touch, a second primer coat may be applied.
NOTE: Double priming will greatly reduce the effects of outgassing by additionally filling the pores in the concrete.
NOTE: Broadcasting grit into PolySpec 100EX Primer is not recommended.
6. Once primer has become tacky to the touch, proceed to installation of a PolySpec flooring or lining system; refer to technical data sheet for installation instructions.
NOTE: Primed surfaces should be recoated within 48 hours. For longer waiting periods, wipe with xylene until surface becomes tacky. If surface remains hard, abrasive sanding is required.
NOTE: Prior to installing an overcoat and/or lining system, closely inspect the surface of the PolySpec 100EX to ensure that no contaminants have settled there. The longer the time between the primer application and the overcoat, the greater the chance of contamination. If any contamination occurs, it should be removed using clean rags with alcohol. Change rags frequently to ensure cleanliness.
7. For best results, clean tools and equipment with PolySpec® All Purpose Cleaner, a nonflammable and non-evaporating cleaner. Always wear gloves when using this product.

2R:1H / DOC PS100EX-TDS

PolySpec and TuffRez are ® Registered Trademarks of PolySpec L.P.

Rev 02/07

© Copyright 2005 PolySpec L.P. All rights reserved. Published technical data and instructions are subject to change without notice. Please visit the online catalog at www.polyspec.com for the most current technical data and instructions. Or, you may contact your PolySpec representative for current technical data and instructions.

PolySpec, L.P. warrants its products to be free from defects in material and workmanship. PolySpec's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at PolySpec's option, to either replacement of products not conforming to this warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to PolySpec in writing within five days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify PolySpec of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

PolySpec makes no other warranties concerning this product. No other warranties, either expressed or implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall PolySpec be liable for consequential or incidental damages.

Any recommendation or suggestion relating to the use of the products made by PolySpec, whether in its technical literature, or in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for the Buyer to satisfy itself of the suitability of the products for its own particular use, and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment changes in procedures of use, or extrapolation of data may cause unsatisfactory results. PolySpec cannot guarantee that color will conform to sample, if provided.