

PG-100E

A CHEMICAL RESISTANT, 100% SOLIDS, SOLVENT-FREE, HIGH-BUILD, TWO-PART, EPOXY FLOOR COATING APPLIED TO A VARIETY OF SURFACES

PG-100E is a chemical resistant, 100% solids, solvent free, high-build, high-gloss, two-part, epoxy floor coating. PG-100E is available in clear and in a variety of colors. PG-100E was formulated for demanding environmental applications such as commercial, industrial and institutional environments where a chemical resistant floor is desired. It provides an aesthetic floor with a tough, high gloss finish that combines excellent acid and chemical resistance with superior adhesion to clean bare concrete. Nominal application thickness of PG-100E is 8 to 20 mils.

TYPICAL USES

- Bottling plants
- Airplane hangars.
- Laboratories.
- Garages.
- Pharmaceutical plants.
- Clean rooms.
- Hospitals.
- Laundries.
- Kennels.
- Warehouses.

ADVANTAGES

- Meets or exceeds USDA, FDA, OSHA and LEEDS requirements.
- Superior resistance to chemical attack and etching.
- High Gloss: Clear and Colors
- Quick and easy installation.
- Durable and long lasting.
- Resistant to algae, fungi, mildew and mold.
- Does not promote bacterial growth.
- Resistant to UV degradation.

BENEFITS

- Stain resistant.
- Easy to clean.
- Good color stability.
- Durable.
- Low viscosity.

HEAT RESISTANT EXPOSURE

Continuous at 120 °F
Intermittent at 300 °F

SURFACE PREPARATION

The substrate must be profiled, clean, sound and dry. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, laitance, curing compounds, form release agents, paint or any other foreign material which might effect the bond. Suitable preparation methods include grit-blasting, scarification and acid etching. New concrete must be fully cured (28 days minimum). Cracks must be repaired. The recommended minimum pull-off strength of the prepared substrate is 200 psi.

CONCRETE MOISTURE CONCERNS

Moisture vapor transmission in the slab should be measured prior to application of polymer systems to ensure a long lasting, durable installation. Moisture emission must not exceed 3.0 pounds per 1,000 square feet per 24 hours.

MIXING

PG-100E is a two-part resin, one-part hardener ratio material: (2) Part A: (1) Part B. When combined and mixed, PG-100E has a 15 minute pot life. Mix together only a total volume that can be applied within pot life.

CHEMICAL RESISTANT LEVELS

Level I: PG-100E

Provides good chemical resistance in environments where there is limited chemical exposure to chemicals such as:

- Anti-freeze (Propylene Glycol)
- Kerosene
- Sodium Hydroxide @ 50%
- Urine

Level II: PG-100E CRD

Provides increased chemical resistance in environments where upgraded chemical resistance is needed for exposure to chemicals such as:

- Acetic Acid 10%
- Formaldehyde 37%
- Phosphoric Acid
- Tannic Acid

Level III: PG-100E CRA

Provides maximum resistance in environments where there is extreme chemical exposure to chemicals such as:

- Ammonium Hydroxide 30%
- Chromic Acid 25%
- Nitric Acid 65%
- Sulfuric Acid 98%

APPLICATION

PG-100E can be applied using a roller, brush or squeegee and back roll method.

PATCHING

When using PG-100E and sand to patch or pitch, mix PG-100E first then add sand to achieve desired stiffness and apply using a trowel. The troweled material (cured) may require a coat of PG-100E to seal the patch prior to the application of a PolyGreen System.



60 REAR NEWHALL STREET.....LOWELL, MA 01852 USA

PHONE: 800-442-5535.....WWW.POLYGREENSYSTEMS.COM.....FAX: 978-453-2416

PolyGreen Systems is a Division of Umaco, Inc.

CURING

PG-100E at 65°F will cure within 4 to 6 hours. NOTE: If PG-100E is allowed to cure for more than 18 hours, the surface should be sanded to abrade.

SLIP RESISTANCE & CLEANABILITY

Normally, the smoother the finished surface, the easier the coating or flooring system is to clean. The more aggressive or textured flooring system will offer a greater degree of skid inhibition but is usually more difficult to clean.

CLEANING & DISINFECTING

Cleaning and disinfecting compounds and cleaning techniques may affect the color, gloss or texture of a polymer coating or flooring system. As a precautionary step, it is recommended that the end user test the cleaning and disinfecting compounds on a sample or small finished area utilizing the intended leaning technique prior to cleaning the entire surface. If no deleterious effects are observed, the procedure can be continued. However, if the cleaning and disinfecting compounds or cleaning technique damage the color, the gloss or texture modification of the materials and/or procedures are required.

PACKAGING

- Three gallon can kits. (2) Part A: (1) Part B
- Five gallon pail kits. (2) Part A: (1) Part B

LIMITATIONS

This product is best suited for application in temperatures between 55°F and 95°F. Substrate must be clean, sound and dry.

CAUTION

Follow the MSDS for proper personal protective equipment to use when handling the product. Use only as directed.

KEEP OUT OF REACH OF CHILDREN.

For technical assistance call 800-442-5535

www.polygreensystems.com

LIMITED WARRANTY

The manufacturer guarantees its products to be free of defects and the extent of its liability is limited to the purchase price of the materials only, if proved to be defective. Improper mixing, incorrect application or other factors beyond the control of the manufacturer or its dealers may produce unsatisfactory results and cannot be held to be the manufacturers or its dealers responsibility. There are no other guarantees either expressed or implied.

TYPICAL PHYSICAL PROPERTIES PG-100E

Physical Property	Test Method	Result
Tensile Strength	ASTM D 638	6,000 PSI
Tensile Strength	ASTM C 307	2,200 PSI
Compressive Strength	ASTM D 695	16,500 PSI
Compressive Strength	ASTM D 579	10,500 PSI
Bond Strength to Concrete	ASTM 4541	> 400 PSI
Shear from Steel Plate	MIL D 3134	1,050 PSI
Impact Strength	MIL D 3134 No Chipping, Cracking or Delaminating	PASSING
Hardness	ASTM D 2240 SHORE D	75-85
Elevated Temperature	MIL D 3134	No Slip or Flow
Electrical Conductivity	-	Non-Conductive
Flexural Strength	ASTM D 790	5.5 x 10
Linear Expansion	ASTM D 696	2 x 10
Indentation	MIL D 3134	.025 MAX
Abrasion Resistance	ASTM D 4060 CS 17 Wheel GM Load 1000 Cycle	0.15 gr
Coefficient of Friction Smooth	ASTM D 2047	0.7
Water Absorption	ASTM D 570	0.04%
Flammability	ASTM D 635	Self Extinguishing
Flame Spread NFPA-101	ASTM E 84	Class A
Anti-Microbial Resistance	ASTM G 21	Passes
Yellow Index	ASTM D 1925	<15@ 2,000 Hours
Toxicity	-	Non-Toxic USDA Approved
VOC Content	-	Zero

PolyGreen Systems
60 Rear Newhall Street
Lowell, MA 01852
Phone: 800-442-5535
Fax: 978-453-2416

