



GENERAL PURPOSE EPOXY

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

General Purpose Epoxy comes in Standard Cure, FC (Fast Cure), and LPL (Long Pot Life). It is an Economic Two-Component "Gray Only" Pigmented Epoxy that can be used as a Primer, Build Coat, Mortar Binder or Topcoat. It is a Low Viscosity, 100% Solid, Zero V.O.C., Low Odor Epoxy.

COLOR

Available in Anchor, Black, Clear, Harvest, Parchment, Smoke, and White.

FEATURES

- Complies with USDA, FDA, Food Safety Modernization Act.
- With the Correct Aggregate Meets Slip Resistance (ADA) for flat and incline surfaces.
- LEED® and Green Seal® requirements.
- 100% Solids, Zero VOC and EPA Compliant in all states and provinces in North America, and low odor during installation. Cures to an inert finish.
- Strong and Tough Floor.
- Designed for new floors and for resurfacing old floors
- Standard, FC (Fast Cure) and LPL (Long Pot Life)

LIMITATIONS

- This product is best suited for applications in temperatures between 60°F to 90°F (16°C to 32°C).
- Scratches of pigmented products can appear white.
- Higher temperatures will result in shortened working time and faster drying time.
- Color may vary due to batch to batch variation, always "box" different batches to avoid color differences.
- Do not use as a primer when concrete slab exceeds 3lbs M.V.T. (Moisture Vapor Transmission) or 80% RH (Relative Humidity). When Slab exceeds 3lbs Consult a DPF Technical Representative before using.

USES

- Automotive Show Room, Garages and Repair Floors
- Commercial Bakeries and Kitchens Floors
- Hospital and Health Care Facility Floors
- Laboratories and Research Floors
- Manufacturing and Warehouse Floors
- Pharmaceutical Floors
- Residential Interiors and Garage Floors

*See Desert Polymer Flooring Top Coats and Finish Coats for Enhanced Abrasion, Chemical and Stain Resistance.

COVERAGE RATE PER GALLON

- Primer: 200 sq. ft. (18.9 sq. m.) WFT 8 (0.20)
- Body Coat: Varies depending on use.
- Topcoat: 100 to 160 sq. ft. (9.3 to 14.9 sq. m) WFT 10 to 16 mils (0.25 to 0.41 mm)
- Broadcast, Slurry and Trowel: Varies Depending on thickness of system selected. 1/16 to 1/4 inch (1.59 to 6.35 mm) and more.

CHECK CONCRETE MOISTURE

Concrete must be dry before application of this floor coating material. Concrete moisture tests are required, either ASTM F1869 (calcium chloride) or ASTM F2170 (in situ RH probe).

TEMPERATURE AND HUMIDITY

Floor and material temperature must be at or above the published Technical Data Sheet requirements. Relative Humidity must be 5°F (3°F) below the dew point. Do not apply if humidity is at or above 85%.

SURFACE PREPARATION

Surface preparation in accordance with: ICRI Guideline No. 310.2R Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair. The pH of the concrete substrate should be at 9 or above. All bond-breaking material must be removed.

APPLICATION EQUIPMENT

Depending on system applied: Disposable 3" brush for cutting in, variable low speed drill (450 rpm) with Jiffy® type impeller mixing paddle, 3/8 inch nap non-shedding phenolic core roller and V-notched rubber squeegee for spreading neat epoxy and gauge rake or trowels for thicker applications.

MIXING

For ease of mixing and placement, the temperature of the "A" and "B" components should be between 60°F to 80°F (16°C to 26°C). Pre-mix the "A" and "B" component to ensure all raw material and pigments are dispersed uniformly.

APPLICATION

After mixing all contents as instructed, immediately pour all liquid material on to the properly prepared concrete substrate or next epoxy lift in ribbons and squeegee the material out evenly. Check for desired wet film thickness with a WFT Gauge. Back-roll and cross-rolling of material is critical for receiving coat, lock coat, grout coat, top coat and finish coat. If broadcasting aggregate, broadcast into the wet material. Place trowel mortar mix within installation sequence.

SKID RESISTENCE

Skid-Resistance – Field (in situ) Wet Dynamic Coefficient of Friction (DCOF), ANSI A326.3.

CLEAN-UP

Clean-up mixing station, tools and equipment as required. Use acetone, a VOC exempt solvent, for cleaning up. Observe all legal, and health and safety precautions when handling or storing solvents and materials, particularly in confined spaces. Make sure the working areas are well ventilated at all times during placement and curing time.

| PHYSICAL PROPERTIES @ 77°F (26°C) | |
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| VOC (Volatile Organic Compounds) , (VOC Calculated Per ASTM D3960) | 0 gr./lt. |
| Viscosity , Mixed Epoxy and Hardener | 750 cps |
| Primer Optional - Dilute with 10% Acetone will lower viscosity | 350 cps |
| Mix Density , Mixed Epoxy and Hardener | 9.2 lb./gal. |
| Pot Life , gallon (3.79 liters) Mass, Pot Life is Reduced by Increases in Mass & Temperature | Standard 20 Minutes Fast Cure 10 Minutes Long Pot Life 40 Minutes |
| Mix Ratio, by Volume | 2:1 |

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| Minimum Application Surface Temperature | 50°F |
| Dry to Touch | Fast Cure: 4 Hours Standard Cure: 6 Hours Slow Cure: 8 Hours |
| Recoat Time | 18 – 24 Hours |
| Light Traffic | 72 Hour |
| Full Cure | 7 Days |
| Shelf Life (shipped and stored) at 40°F to 100°F (4.4°C to 38°C) | 1.5 Years |
| Packaging 3, 15 gal. (11.4, 56.8 liters) | |
| Compressive Strength, ASTM D695, 8 Hours | 6,300 psi |
| Compressive Strength, ASTM D695, 1 Day | 8,500 psi |
| Compressive Strength, ASTM D695, 7 Days | 9,500 psi |
| Compressive Strength, ASTM C579, with aggregate | 10,750 psi |
| Tensile Strength, ASTM D638 | 7,500 psi |
| Tensile Elongation, ASTM D638 | 5% |
| Flexural Strength, ASTM D790 | 9,500 psi |
| Slant Shear, ASTM C882 | 4,000 psi |
| Adhesion, ASTM D7234, Concrete Failure | >400 psi |
| Hardness (Shore D) ASTM D2240 | 70 – 75 |
| Water Absorption, ASTM D570 Resin & Hardener | 0.15% |
| Flame Test, ASTM E648 | Class 1 |
| Flammability, ASTM D635 | Self-extinguishing. Bonded to Concrete |
| Abrasion Resistance, ASTM D4060 Resin & Hardener 500 cycles, Wheel No. CS17, 1000 gr. Load | 0.03 gr. |
| Coefficient of Thermal Expansion (-22°F to 86°F) | 1.8x10 ⁻⁵ in./in. °F |

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| Microbial (fungi) Resistance ASTM G21 (Without the Anti-Microbial Agent) | Pass #1 |
| Dynamic Coefficient of Friction, ASNI 326.3 Depends on texture of system selected, ranging from smooth to aggressive. BOT 3000E | >0.45 (inclines) >0.42 (level) |
| Moisture Vapor Emission Rate, ASTM F1869* | 3 lbs. |
| Moisture Relative Humidity, ASTM F2170* | 80% RH |

of the material and proper application procedures. Test performance results were obtained in a controlled environment and Desert Polymer Flooring makes no claim that these tests or any other tests, accurately represent all environments.

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*Contact DPF Technical Representative moisture or relative humidity exceeds their limits.

WARRANTY AND DISCLAIMER

Please read all information in the Safety Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. Desert Polymer Flooring Products are for "Professional Use Only" and preferably applied by professionals who have prior experience with the Desert Polymer Flooring Products or have undergone training in application of Desert Polymer Flooring Products. Published technical data and instructions are subject to change without notice. Contact your local Desert Polymer Flooring representative or visit our website for current technical data, instructions, and project specific recommendations.

LIMITED WARRANTY

Desert Polymer Flooring warrants its products to be free of manufacturing defects and that they will meet Desert Polymer Flooring current published physical and chemical properties. Seller's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by Desert Polymer Flooring of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Desert Polymer Flooring shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Desert Polymer Flooring shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Desert Polymer Flooring reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

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