



SLABREZ® 600

TECHNICAL DATA SHEET

CHEMICAL RESISTANT EPOXY

PRODUCT ID: SR-6003A, SR-6002B, SR-6003B, SR-6004B, SR-60015A, SR-60016B, SR-60017B, SR-60018B

PRODUCT DESCRIPTION

SLABREZ® 600 is a high-performance hybrid (BIS-F/BIS-A) 2-component epoxy. Featuring outstanding abrasion and chemical resistance. It is a low viscosity, low odor, 100% solids thermosetting epoxy designed especially for challenging flooring environments, such as industrial kitchens, commercial laboratories, and wine and spirit processing facilities subjected to heavy foot traffic, forklift traffic, and chemical attack, specifically food acids. This is a through-product that can be applied directly to properly prepared substrates as a primer, body coat (with/without aggregate), and topcoat. It is VOC Compliant in all states and provinces in North America.

EPOXY HARDENER – SELECTION GUIDE

Desert Polymer Flooring offers three types of hardeners depending on installation demands, ambient temperature, and surface temperature conditions. The hardeners are available in regular, fast cure, and slow cure formulas:

- Regular Cure hardener is designed for temperatures ranging from 50°F to 80°F (10°C to 27°C). This hardener is the most popular hardener product.
- Fast Cure (“FC”) Hardener is designed for temperatures ranging from 40°F to 60°F (4°C to 16°C).
- Slow Cure (“SC”) Hardener is designed for temperatures ranging from 80°F to 90°F (27°C to 32°C).

When in doubt about which hardener to use contact a Desert Polymer Flooring representative.

TYPICAL USES

- Animal Care and Housing Floors
- Automotive Show Room and Repair Floors
- Commercial Bakeries and Kitchens Floors
- Food, Beverage and Spirits Processing
- Hospital and Health Care Facility Floors
- Laboratories and Research Floors
- Manufacturing and Warehouse Floors

- Mechanical Equipment Room Floors
- Pharmaceutical Floors

BENEFITS

- Complies with USDA, FDA, Food Safety Modernization Act.
- Slip Resistance (ADA)
- LEED® and Green Seal® requirements.
- VOC and EPA Compliant all states and provinces in North America. Cures to an inert finish.
- Strong and Tough Floor
- Excellent Chemical and Abrasion Resistance
- Good UV Resistance for an Epoxy (Hardener “S” has the best UV color retention.)
- Can be used as a through-product: Primer, Body (with/without aggregate), and topcoat
- Designed for new floors and for resurfacing old floors

LIMITATIONS

- This product is best suited for applications when the temperature is between 60°F to 90°F (16°C to 32°C).
- Scratches in certain colors may appear white, such as blue pigmented products.
- Higher temperatures will result in shortened working time and drying time.
- Color may vary due to batch variation. Always “box” different batches to avoid it.

COLORS

Clear, 15 standard colors and custom colors. Available in factory pigmentation or SLABREZ Pigment Packs.

COVERAGE RATE PER GALLON

- Primer: 160 to 200 sq. ft. (14.9 to 18.9 sq. m.) to 10 mils (WFT)
- Coating: 100 to 160 sq. ft. (9.3 to 14.9 sq. m) 10 to 16 mils (WFT)
- Broadcast and Trowel: Varies Depending on the thickness of the system selected. 1/16 inch to 1/4 inch and more.

HANDLING AND SAFETY

Warning! Eye and skin irritant. May cause dermatitis and sensitization. Always read and follow the product SDS. Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mist, and spray. Use good ventilation.

CONCRETE

Concrete must be structurally sound and free of curing agents, coatings, sealers, densifiers, and other bond breakers.

New Concrete:

- Place concrete per ACI 302.2R Guide for Concrete Slabs that Receive Moisture-Sensitive Floor Materials.
- Water Cement Ratio 0.4 to 0.5, and an approximate 4,000 psi (28 MPa) strength level.
- Requiring a positive side moisture barrier in direct contact with the concrete meeting ASTM E1745 Standard Specification for Plastic Water Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.
- The moisture barrier needs to be placed per ASTM E1643 Standard Practice for Selection, Design, Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs, Class A 15 mils (0.38mm)

Existing Concrete:

If field tests or laboratory analysis reveals inferior concrete flooring slabs containing contaminants from previously applied unreacted silicate materials that will interfere with the bond, use **SLABLOC® 50**.

- Contaminants include, but are not limited to, organic hydrocarbon materials, calcium chlorides and aluminum stearates.
- Concrete flooring slab can lose their structural strength over time, caused by conditions beyond the control of the flooring manufacturer or the installation contractor.
- If the concrete substrate deteriorates sufficiently, it will no longer support the bond of the remediation floor system.

Such conditions are detailed in ACI 201.2R "Guide to Durable Concrete" published by the American Concrete Institute.

PHYSICAL PROPERTIES @ 77°F (25°C)			
VOC (Volatile Organic Compounds), (VOC Calculated Per ASTM D3960)	0 gr./lt.		
Standard Viscosity Clear, Mixed Epoxy and Hardener	650 cps		
Standard Cure Clear, Mixed Epoxy and Hardener, at 50°F (10°C)	1200 cps		
SLABREZ 600 <i>(Regular Cure - Clear Only)</i> Dilute 10% Acetone	50°F (10°C)	77°F (25°C)	90°F (32°C)
	300 cps	120 cps	60 cps
Mix Density Clear, Mixed Epoxy and Hardener	9.23 lbs./gal		
Pot Life, 1 gallon (3.79 liters) Mass, Pot Life is Reduced by Increases in Mass and Temperature	20 Minutes		
Mix Ratio, by Volume	2:1		
Minimum Application Temperature with "F" Fast Cure Hardener	40°F		
Dry to Touch 40°F to 90°F (4°C to 32°F)	4 - 6 Hours		
Recoat Time 40°F to 90°F (4°C to 32°F)	12 - 72 Hours		
Light Traffic 40°F to 90°F (4°C to 32°F)	24 Hour Minimum		
Full Cure 40°F to 90°F (4°C to 32°F)	7 - 14 Days		
Shelf Life (shipped and stored) at 40°F to 100°F (4.4°C to 38°C)	1.5 Years		
Packaging 1.5-gallon kit and 15-gallon kits (5.7 lt. and 56.8 lt.)			

MECHANICAL PROPERTIES @ 77°F (25°C)

Surface Preparation ICRI 310.2R
Concrete Surface Profile (CSP 2 to CSP 4)
Depending on System to be Installed and Condition
of Concrete.

Compressive Strength, ASTM D695, 7 Days	12,000 PSI
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Tensile Strength, ASTM D638	4,500 psi
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Tensile Elongation, ASTM D638	2%
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Adhesion, ASTM D7234, Concrete Failure	>400 PSI
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Hardness (Shore D) ASTM D2240	80-85
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Water Absorption, ASTM D570 Resin & Hardener	0.15%
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Abrasion Resistance, ASTM D4060 Resin & Hardener 500 cycles, Wheel No. CS17, 1000 gr. Load	0.026 gr.
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Microbial (fungi) Resistance, ASTM G21 (Without the Anti- Microbial Agent)	Pass #1
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Dynamic Coefficient of Friction, ANSI 326.3. Depends on texture of system selected, ranging from smooth to aggressive. BOT 3000E	>0.45 (inclines) >0.42 (level)
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Moisture Vapor Emission Rate, ASTM F1869*	3 lbs.
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Moisture Relative Humidity, ASTM F2170*	80% RH
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Relative Humidity, F2170 Concrete Place NOT per ACI 302.2R contract Desert Polymer Flooring Technical Representative.	
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Note: Although testing is critical, it is not a guarantee against future problems. This is especially true if there is not a positive side vapor barrier, or it is not functioning properly and/or concrete has contamination from oils, chemical spills, densifiers, excessive salts or other bond breakers.

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). Refer to appropriate Technical Data Sheet limits.

CHECK TEMPERATURE & HUMIDITY

Floor and material temperature must be at or above the published Technical Data Sheet. Dew Point must be 5°F (3°F) or more below the surface temperature. 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: Variable low speed drill (450 rpm) with Jiffy® type impeller mixing paddle, disposable 3" brush for cutting in, 3/8-inch nap non-shedding phenolic core roller and V-notched rubber squeegee.

OPTIONAL ANTIMICROBIAL

The antimicrobial additive is a non-heavy metal biocide that can be added during the manufacturing process. The antimicrobial agent can be added to the topcoat only for an economical application or it can be added to each step of the application, primer, body coat, and topcoat, which is recommended for abusive environments.

MIXING

For ease of mixing and placement, the temperature of the "A" and "B" components should be between 70°F to 80°F (20°C to 26°C). Pre-mix the "A" and "B" components to ensure all raw material and pigments are dispersed uniformly. Box pigmented products if using different batch numbers for uniform color. Mixing one gallon "A" with 0.5 gallon "B" for two full minutes before application. (For 15 gallon kit, repeat this step in same 1.5 gallon increments until all product has been mixed.)

APPLICATION

After mixing all contents as instructed, immediately pour all liquid material on to the properly prepared concrete substrate in ribbons and squeegee the material out evenly. Back-roll and cross-roll material. Check for desired wet film thickness with a WFT Gauge. Back-rolling and cross-rolling of material are critical. If broadcasting aggregate,

broadcast into the wet material. Place trowel mortar mix within installation sequence. Lock coat, grout coat, or topcoat.

SKID RESISTENCE

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

SHIPPING AND STORAGE

Ship and store material between 40°F to 90°F (4°C to 32°C). Store in a dry environment and out of direct sunlight.

SHELF LIFE

Shelf life is 1 year from the date of manufacturer, provide the containers are unopened.

CLEAN-UP

Clean-up mixing station, tools and equipment as required. Use acetone, a VOC exempt solvent, for cleaning up. Observe all legal, 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.

DISPOSAL

Dispose of empty packaging and other waste in accordance with federal, state, provinces and local regulations.

MAINTENANCE

Inspect the installed floor by spot cleaning and spot repairing the damaged or cracked areas. To prolong life of the flooring system, a daily maintenance program is highly recommended to ensure the floor is safe for its intended purposes.

TECHNICAL SUPPORT

For questions, contact a Desert Polymer Flooring representative.

LIMITED WARRANTY

Desert Polymer Flooring warrants its products to be free of manufacturing defects and meets all Desert Polymer Flooring's current published physical properties. Desert Polymer Flooring's sole responsibility shall be to replace the portion of any product proved 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 the use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee pertaining to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator will be issued. 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.

DISCLAIMER

All technical bulletins, installation guidelines, guidelines, recommendations, statements, specifications, and technical data contained herein are based on information and tests. The accuracy and completeness of such tests are not guaranteed and are not to be construed as a warranty, expressed or implied. It is the responsibility of the user to document information and tests to determine the intent of the product for ones' own use. The application, job conditions and user assume all risks and liability resulting from use of the product. We do not suggest or guarantee any hazards listed herein are the only ones, which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use the product. Recommendations or statements, whether in written or verbal, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile 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. Not responsible for any typographical errors.

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