DC450 High Build Epoxy UV

BODY / TOPCOAT

PRODUCT DESCRIPTION:
EPIC DC450 is a high-build, clear coat epoxy which is fortified with **UV resistant additives**, which provide greater resistance to yellowing from sunlight and UV exposure. This product can be used as a clear base for decorative broadcast systems such as quartz and other aggregates. Also excellent for use as a grout coat over a broadcast base such as flake or quartz. Often used in environments where hygiene is critical, such as **hospitals and health care facilities**. Exhibits low to no odor.

SOLIDS BY WEIGHT: 100%
SOLIDS BY VOLUME: 100%
VOLATILE ORGANIC CONTENT: Less than 3 g/l
STANDARD COLORS: Available in Clear only – gardner color 1-2
RECOMMENDED FILM THICKNESS: 16-18 mils
COVERAGE PER GALLON: 90-100 square feet per gallon @ 16-18 mils
PACKAGING INFORMATION 3 gallon kits. 15 gallon kits
MIX RATIO: 2 parts A to 1 part B by volume. (volumes approx.)
SHELF LIFE: 1 year in unopened containers
FINISH CHARACTERISTICS: Gloss (60 to 90 @ 60 degrees @ glossmeter)
ABRASION RESISTANCE: Taber abraser CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 36 mg loss
FLEXURAL STRENGTH: 7,400 psi @ ASTM D790
COMPRESSIVE STRENGTH: 11,200 psi @ ASTM D695
ADHESION: 350 psi @ elcometer (Concrete failure, no delamination)
VISCOSITY: Mixed = 700-1000 cps (typical)
DOT CLASSIFICATIONS: Part A "not regulated" Part B "CORROSIVE LIQUID N.O.S., 8, UNI1760, PGIII"
TENSILE STRENGTH: 7,600 psi @ ASTM D638
ULTIMATE ELONGATION: 4.1%
GARDNER VARIABLE IMPACTOR: 50 inch pounds direct – passed
HARDNESS: Shore D = 81
PRIMER: Recommended DC110 clear.
TOPCOAT: Optional. Epic urethane topcoat products or successive coats of DC450.

CURE SCHEDULE: (70°)	
Pot life (1.5 gallon volume)	25-35 minutes
Tack Free (Dry to Touch)	7-9 hours
Recoat or Topcoat	12-16 hours
Light Foot Traffic	16-18 hours
Full Cure (Heavy Traffic)	2-7 days
Application Temperature:	55-90°F

CHEMICAL RESISTANCE	
Butanol	C
xylene	C
1, 1, 1, Trichloroethane	B
MEK	A
Methanol	A
Ethyl Alcohol	C
10% sodium hydroxide	E
10% sulfuric	C
10% HC1 (aq)	C
50% Sodium Hydroxide	D
Skydrol	B
5% Acetic Acid	B

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

MIXING AND APPLICATION INSTRUCTIONS (DC450)

PRODUCT STORAGE: Store product in an area so as to bring the material to normal room temperature before using. Continuous storage should be between 60 and 90 degree F. Low temperatures or temperature fluctuations may cause crystallization.
SURFACE PREPARATION: The most suitable surface preparation would be a fine brush blast (shot blast) to remove all laitance and provide a suitable profile. All dirt, foreign contaminants, oil and laitance must be removed to assure a trouble free bond to the substrate. A test should be made to determine that the concrete is dry; this can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbanding.
PRODUCT MIXING: This product has a mix ratio of 1 gal. part A to ½ gal. part B (volumes approx.) Standard packages are in pre-measured kits and should be mixed as supplied in the kit. We highly recommend that the kits not be broken down unless suitable weighing equipment is available. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. After mixing, transfer the mixed material to another pail (the transfer pail) and again remix. The material in the transfer pail is now ready to be applied on the primed substrate. Improper mixing may result in product failure.
PRIMING: A suitable primer should be used before applying this product. See the front side of this technical data for primer information. If a primer is not used, more porous substrates may cause outgassing and possible surface defects.
PRODUCT APPLICATION: The mixed material can be applied by brush or roller. However, the material can also be applied by a suitable serrated squeegee and then back rolled as long as the appropriate thickness recommendations are maintained. Maintain temperatures and relative humidity within the recommended ranges during the application and curing process. If concrete conditions or over aggressive mixing causes air entrapment, then an air release roller tool should be used prior to the coating tacking off to remove the air entrapped in the coating. This product can be used with various colored sand in a broadcast system or other suitable aggregate can be used in conjunction with this product to achieve a variety of color and application patterns. When using a broadcast binder, always evaluate performance parameters with a test area which is dependent on aggregate size and thickness, prior to application. Contact your representative for details as necessary.
RECOAT OR TOPCOATING: If you opt to recoat or topcoat this product, you must first be sure that the coating has tacked off before recoating. Always remember that colder temperatures will require more cure time for the product before recoating or topcoating can commence. Before recoating or topcoating, check the coating to ensure no epoxy blushes were developed (a whitish, greasy film or deglossing). If a blush is present, it must be removed prior to topcoating or recoating. Many epoxy coatings and urethanes are compatible for use as a topcoat for this product as well as multiple coats of this product.
CLEANUP: Use xylol.
FLOOR CLEANING: Some cleaners may affect the surface appearance. Test each cleaner in a small area. If no ill effects are noted, you can continue to clean with the product and process tested.
RESTRICTIONS: Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle. Depending on actual complete system application, the surface may be slippery, especially when wet or contaminated; keep the surface clean and dry.
LIMITATIONS:

- This product is not 100% UV color stable but has very good UV resistance for an epoxy product. Clear aliphatic urethane top coats can further reduce (UV light) color changes.
- Substrate temperature must be 5°F above dew point.
- For best results, apply with a ¼" nap roller.
- All new concrete must be cured for at least 30 days prior to application.
- Apply a suitable primer before using this product. Physical properties are typical values and not specifications.

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. N0 WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT. We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.