



DC420 Multi-Purpose High Build Epoxy

PRIME/BODY/TOP

PRODUCT DESCRIPTION:

DC420 is a high build epoxy that has a wide variety of uses. This versatile product can be used as a primer, body or top coat. Available in a clear resin base which be colored with Epic solid color or metallic pigment at the jobsite. Due to its outstanding body and clarity , DC420 is an excellent base for broadcast systems including Quartz, Flake and many other decorative accents. **Exhibits low to no odor.**

SOLIDS BY WEIGHT: 100%**SOLIDS BY VOLUME:** 100%**VOLATILE ORGANIC CONTENT:** Less than 2 g/l**MIX RATIO:** 2 parts A to 1 part B per liquid volume**STANDARD COLORS:** Clear – gardner color 1-2. Available in clear base. Colors can be added by using DC420 Pigment packs on-site. See Epic color charts for color options.**Solid Color Pigment Packs:** Solid colors can be blended on site using DC 420 pigment packs. Solid Color Blending Ratio: 1-quart pigment per 1.5 gallons of blended DC420 (A+B)

Pigment Pack colors: Light Grey, Medium Grey, Dark Grey, Charcoal Grey, Black, SE Camel, and Fazor Tan

Metallic Pigment: Metallic colors can be added using Epic Metallic Pigment Powder. Metallic Blending Ratio: 4oz of Metallic Pigment per gallon blended DC420 (A+B) See website for Metallic Colors.**RECOMMENDED FILM THICKNESS:** 16-18 mils**COVERAGE PER GALLON:** 90-100 square feet per gallon @ 16-18 mils**PACKAGING INFORMATION:** 3 gallon kits (2.95 gallons net approximately) 15 gallon kits (14.75 gallons net approximately)**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, UN11760, 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 DC740 clear**TOPCOAT:** Optional – Epic aliphatic urethanes, polyaspartic coatings such as DC300 or DC320 or DC420 in aggregate filled systems, with or without a clear urethane topcoat.

| CURE SCHEDULE: (70°) Application Temperature: 55-90 degrees F | |
|--|---------------|
| Pot life (1 1/2 Gallon) | 20-30 minutes |
| Tack Free (Dry to Touch) | 6-8 hours |
| Recoat or Topcoat | 10-16 hours |
| Light Foot Traffic | 14-18 hours |
| Full Cure (Heavy Traffic) | 2-7 days |

| CHEMICAL RESISTANCE | |
|---|---|
| Butanol | C |
| Acetic acid 5% | B |
| Xylene | C |
| MEK | A |
| 1, 1, 1, Trichloroethane | C |
| Ethyl Alcohol | C |
| Skydrol | B |
| 10% Sodium Hydroxide | E |
| 50% Sodium Hydroxide | D |
| 10% Sulfuric | C |
| 70% Sulfuric Acid | A |
| 10% HC1 (aq) | C |
| Methanol | A |
| 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 (DC420)

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 9.0# part A to 4.15# part B. 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. **Color pigments and decorative aggregates**, when used in this product, should be added to Part A and blended well with slow speed mixing equipment such as a jiffy mixer. After blending has been completed, add Part B to this mixture and mix well. After mixing A, B and aggregate or color, transfer the mixed material to another pail and again remix. The material 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 as 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: Caution! Some cleaners may affect the color. 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. Dependent on actual complete system application, surface may be slippery, especially when wet or contaminated; keep surface clean and dry

Considerations:

- Color stability or gloss may be affected by environmental conditions such as high humidity, chemical exposure, UV exposure or exposure to lighting such as sodium vapor lights.
- This product is not 100% UV color stable. A urethane or polyaspartic coating can be applied to create UV resistance.
- Substrate temperature must be 5°F above the 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.

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. NO 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.