



DC855 ESD URETHANE TOPCOAT

ANTI-STATIC TOPCOAT

Epic DC855 ESD is a two-component aliphatic polyurethane floor coating that exhibits excellent characteristics for abrasion, chemical resistance, flexibility, weathering, UV stability, and static dissipative properties. The electro-conductive powders used retain their conductive properties regardless of temperature or humidity and perform in any environment. Recommended for computer rooms, laboratories, aircraft hangers, exterior tanks, indoor or outdoor service, and chemical exposure areas and can be used on concrete, cement, brick, masonry, or metal.

SOLIDS BY WEIGHT: Mixed= 70% (+,-2%)

SOLIDS BY VOLUME: Mixed= 63.8 (+,-2%)

VOLATILE ORGANIC CONTENT: Less than 359 g/l

COLORS: Standard colors include light gray, medium gray, and tile red. Custom colors available upon request.

REQUIRED FILM THICKNESS: 3-5 mils per coat wet thickness (yields 2-3 mils dry)

COVERAGE PER GALLON: 320 to 500 square feet @ 3-5 mils wet thickness

PACKAGING INFORMATION 3 gallon and 15 gallon kits (volumes approximate)

MIX RATIO: 2 parts A to 1 part B by volume

SHELF LIFE: 1 year in unopened containers

FINISH CHARACTERISTICS: gloss (>60 at 60 degrees @ glossmeter)

ABRASION RESISTANCE: Taber abraser CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 23.0 mg loss

IMPACT RESISTANCE: Gardner Impact, direct & reverse = 150 in. lb. (passed)

FLEXIBILITY: No cracks on a 1/8" mandrel

VISCOSITY: 800-1100 cps (typical)

ADHESION: 380 psi @ elcometer (concrete failure, no delamination with DC850 primer)

DOT CLASSIFICATIONS: "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

HARDNESS: Shore D = 72

APPLICATION TEMPERATURE: 45-90 degrees F. with relative humidity below 90%

PRIMER: Recommend color-coordinated DC850

CURE SCHEDULE: (70°)	
Pot life (1.5 gallon volume)	2-4 hours
Tack Free (Dry to Touch)	5-6 hours
Recoat or Topcoat	Not Recommended
Light Foot Traffic	7-12 hours
Full Cure (Heavy Traffic)	3-5 days

CHEMICAL RESISTANCE	
xylene	E
gasoline	D
50% sodium hydroxide	D
10% sulfuric	D
10% hydrochloric acid	D
20% nitric acid	C
ethylene glycol	D
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.	

ELECTRICAL RESISTANCE: ASTM F150-89	
MEASUREMENT LOCATION	RESISTANCE (OHMS)
1. DC850/DC855	1.32e6
2.	1.25e6
3.	2.17e6
4.	2.12e6

MIXING AND APPLICATION INSTRUCTIONS (DC855)

THIS PRODUCT IS NOT FOR A CONDUCTIVE COATING SYSTEM. THIS SYSTEM IS NOT INTENDED FOR AREAS EXPOSED TO EXPLOSIVE MEDIA SUCH AS AMMUNITION PLANTS. THIS MATERIAL IS PROVIDED AS A STATIC DISSIPATIVE COATING. REVIEW THE DATA ON THE FRONT SIDE OF THIS TECHNICAL DATA UNDER ELECTRICAL RESISTANCE FOR TESTING RESULTS. REVIEW YOUR ELECTRICAL RESISTANCE REQUIREMENTS BEFORE INSTALLING THIS PRODUCT. DO NOT USE WAXES UNLESS THEY ARE SPECIFICALLY FORMULATED AND RECOMMENDED FOR ANTI-STATIC APPLICATIONS. ALWAYS APPLY TEST PATCHES OF YOUR SELECTION TO CHECK CONDUCTIVITY PRIOR TO APPLICATION AND TO BECOME FAMILIAR WITH THE PRODUCTS APPLICATION PROCEDURE.

PRODUCT STORAGE: Store product in an area so as to bring the material to normal room temperature before using.

SURFACE PREPARATION: Surface preparation will vary according to the type of system to be applied. For a one or two-coat thin build system (3-10 mils dry), we recommend either mechanical scarification or acid etching until a suitable profile is achieved. For a complete system build higher than 10 mils dry, we recommend a fine brush blast (shot blast). All dirt, oil, dust, foreign contaminants, 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.

PRODUCT MIXING: Mix two parts A to one part B by volume. 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. Suitable mixing equipment may be necessary to remix in settled metallic pigment.

PRIMER APPLICATION: Apply an appropriate conductive primer, such as Epic DC850 ESD Conductive Primer, before applying the DC855 ESD Urethane. The primer is best earthed with strips of copper about 20 centimeters long, which are anchored in the subfloor and connected to a water pipe or neutral conductor in the electric wiring system. Two grounding points normally suffice for a single room. One ground point per 200 square meters of floor space is the general rule for large areas. After the substrate is grounded, apply the primer.

PRODUCT APPLICATION: The mixed material can be applied by brush or roller to any suitable conductive primer. Maintain temperatures within the recommended ranges during the application and curing process. Allow sufficient time for the primer to cure. See front side under LIMITATIONS for testing procedures. Before coating, check the primer to ensure no epoxy blushes were developed (a whitish, greasy film or deglossing). If a blush is present, it must be removed prior to coating. Thoroughly mix part A and part B together using slow-speed mixing equipment. Apply the DC855 according to the technical data specifications. Be sure to apply the product at the specified coverage rate or recommended thickness.

RECOAT OR TOPCOATING: Multiple urethane top coats cannot be applied. Always remember that colder temperatures will require more cure time before top coating the primer. Leakage resistance should be less than 109 ohms measured at 500 volts per ASTM F150- 89. Typical system applications with the DC850 primer are 105 to 109 ohms tested at 500 volts per ASTM F150-89 over concrete.

CLEANUP: Use xylol

FLOOR CLEANING: Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.

LIMITATIONS: Colors or gloss may be affected by high humidity, low temperatures, chemical exposure, or exposure to lighting such as sodium vapor lights. For best results use a high-quality 3/8" nap roller.

- Slab on grade requires moisture barrier
- Substrate temperature must be 5°F above the dew point.
- All new concrete must be cured for at least 30 days
- Physical properties are typical values and not specifications
- Do not topcoat the primer until the resistance is 106 ohms or lower.
- In some instances, it will require 24 hours before applying the DC855. (It is best to test the primer before top-coating.)
- Tire contact may cause staining and discoloration
- Colors may vary from batch to batch.

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY WARNING: Antistatic flooring cannot provide protection against discharges from the power main. If the danger of coming in contact with the mains cannot be completely ruled out, the usual safety regulations must be followed to the letter. Although this publication describes how our products may be applied to achieve antistatic flooring and the information given is based on the present state of our knowledge, all recommendations are made without liability on our part since the actual application of our products is not in our hands and special conditions prevailing at a particular job sight might negatively influence floors antistatic properties. Buyers and users of our products should make their own assessment of the floor's antistatic properties immediately after it has been installed and at regular intervals thereafter. We warrant that our product is manufactured to the strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. All other 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. **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 be CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING any material, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.

