

TECH DATA - DOC 101

100% SOLIDS EPOXY



PRODUCT DESCRIPTION:

DOC 101 is a two component 100% solids epoxy colored coating designed for applications where a high build colorfast impact resistant floor is needed. This system works great with a colored chip broadcast system or solid color floor. DOC 101 has no VOC's

RECOMMENDED FOR:

Uses include top coat or base coat for concrete and masonry. Works great for garages, warehouses, basements, storage rooms, airport hangers, auto showrooms, and other areas where a heavy duty floor is needed. Product is suitable in many chemical exposure environments.

SOLIDS BY WEIGHT:

100%

SOLIDS BY VOLUME:

100%

VOLATILE ORGANIC CONTENT:

Less than 2 g/l

STANDARD COLORS:

White, off white, black, light gray, medium gray, dark gray, tile red, tan, beige, and safety yellow. (See EpoxyDoc color charts)

RECOMMENDED FILM THICKNESS:

12-30 mils

COVERAGE PER GALLON:

53-130 square feet per gallon @ 12-30 mils

160 square feet per gallon @ 10 mils for garage

PACKAGING INFORMATION:

3 gallon kits 2:1 (Part A 2 gallons, Part B 1 gallon)

15 gallon kits 2:1 (Part A 10 gallons, Part B 5 gallons)

MIX RATIO:

2:1 (1 gallon part A) (.50 gallons part B)

SHELF LIFE:

1 year in unopened containers

FINISH CHARACTERISTICS:

Gloss

AHESION:

450 psi

ABRASION:

CS-17

FLEXURAL STRENGTH:

5,400 psi ASTM D790

COMPRESSIVE STRENGTH:

9,100 psi ASTM D695

TENSILE STRENGTH:

4,800 psi ASTM D638

ULTIMATE ELONGATION:

3.1%

HARDNESS:

Shore D = 80

CURE SCHEDULE:

pot life – 1.5 gallon volume30-50 minutes @ 70° F

tack free (dry to touch).....5-8 hours @ 70° F

recoat or topcoat.....8-12 hours @ 70°F

light foot traffic.....12-14 hours @ 70°F

full cure (heavy traffic)...2-7 days @ 70°F

APPLICATION TEMPERATURE:

60-90 degrees F with relative humidity below 85%

THINNING:

DOC 101 can be thinned 10 to 20% and used as it's own primer. Thin only the first coat to create a sloppy coat to help penetrate the concrete and create a better bond. The second coat should be applied full strength.

PRIMER:

DOC 102 water base primer, or use DOC 101 thinned.

TOPCOAT:

DOC 201, DOC 202, DOC 210, DOC 210.

LIMITATIONS:

- 1) Color or gloss may be affected by humidity, low temperatures, chemical exposure or sodium vapor lighting.
- 2) Product will yellow in the presence of UV light. Apply a urethane or polyaspartic top coat to protect.
- 3) For best results use a 1/4" or 3/8" nap roller.
- 4) Slab on grade requires moisture barrier DOC 130
- 5) Substrate temperature must be 5°F above dew point.
- 6) All new concrete must be cured for at least 30 days
- 7) Product color will vary from batch to batch. Use same batch for entire job.
- 8) Improper mixing or applying this product to thick may result in product failure
- 9) Light or bright colors (white, safety colors etc.) may require multiple coats to achieve an even color depending on the substrate. Usually 2 coats.
- 10) Physical properties listed on this technical data sheet are typical values and not specifications.

MIXING AND APPLICATION INSTRUCTIONS

1) **PRODUCT STORAGE:** Store product at normal room temperature. Continuous storage should be between 60 and 90 degree F. Low temperatures or temperature fluctuations may cause product crystallization.

2) **SURFACE PREPARATION:** Shot blast or grinding the surface is the best prep for concrete. Using a mixture of muriatic acid and water may also be used to provide a suitable profile. If using muriatic acid use only outdoors and power wash off all white residue from the acid. 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. For further testing a moisture test kit can be purchased from EpoxyDoc.

3) **PRODUCT MIXING:** Use a clean bucket. This product has a mix ratio of two parts A to one part B by volume for standard colors. 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 accurate measuring is used. After part A and B are combined, mix well with a slow speed mixing drill and paint mixer for 3 minutes. Improper mixing may result in product failure.

4) **PRIMING:** A suitable primer can 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 out gassing and possible surface defects. DOC 101 may be diluted up to 20% using xylene or comparable for the first coat only. This will allow the epoxy to penetrate better for a better bond.

5) **PRODUCT APPLICATION:** You will need a clean bucket, roller, 3/8 inch roller cover, mixing paddle, cut brush, and optional squeegee. Cut in all edges and corners first. Roll out the epoxy at 160 SF/gallon. For faster results pour mixture onto the floor, and squeegee to distribute the epoxy evenly. Back roll the epoxy using a 3/8 inch roller. For best results apply 2 coats. **Remember:** Mark out an area of 160 square feet for reference, for each 1 gallon of epoxy. For 1 ½ gallons would equal 240 square feet. Kits come as 1 gallon part A and ½ gallon part B. Mix ratio is 2:1. Mix small amounts using 2:1 ratio if more time is needed especially when cutting in edges, doorways, and stairs.

Two coats can be applied at the same time. If mixing 1 ½ gallons, first mark out an area of 240 SF. After mixing A and B, pour 30% of the mixture into a new bucket. Dilute using xylene or equivalent (xylene replacement) 20%. Roll the mixture out from one end of the floor to the other at about 240 square feet. Now with spike shoes on walk out into the floor just rolled and apply the second remaining bucket at full strength. You will achieve 10 mils at 240 SF approximate. For more info on this see our video training or call us for more information. **Remember:** 1 gallon yields 160 SF @ 10 mils. 1 ½ gallon yields 240 SF @ 10 mils. Remember pot life is 30 minutes approx. so have everything ready to go.

- Pot life is about 30 minutes so work in small batches only mix 1 to 1.5 gallons at a time.
- Maintain temperatures within recommended ranges during application and curing.
- When humidity is present, apply epoxy within parameters shown.
- When pot life is reached and epoxy starts to get sticky or hard to apply, stop and mix a new batch.
- Applications made at different times and conditions may show slight variations in color and gloss.
- Decorative paint chips may be broadcast into the wet epoxy to create a granite type floor.
- Decorative paint chips will mask and hide multiple imperfections in the concrete.

6) **RECOAT OR TOPCOATING:** A suitable top coat can be used to protect the epoxy finish. Make sure the epoxy is completely tack free before applying any top coat. Colder temperatures will require more cure time for the product before recoating. If a blush is present, it can be removed by any standard detergent cleaner prior to top coating. Many epoxy coatings and urethanes as well as multiple coats of this product are compatible for use as a topcoat. If recoating after 48 hours, de-gloss before recoat by sanding the surface with a light sand paper.

7) **CLEANUP:** Xylene or like products

8) **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.

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.**
(EPOXYDOC LLC)

SLIP AND FALL INFORMATION
IMPORTANT PLEASE READ

OSHA and the ADA (American Disabilities Act) have set standards for pedestrian surfaces concerning slip resistance. These standards are enforceable and should be taken seriously by professional installers and end users. Most floor coatings are not slip resistant. **EpoxyDoc recommends the use of a slip resistant additive in all flooring systems.** Any floor coatings exposed to water, oil, dirt, grease, and or any other potential slip hazard material should contain a slip resistant additive. EpoxyDoc or its sales agents shall have no liability and will not be responsible for incidents or injuries incurred in a slip and fall accident. It is the end user's and professional installer's responsibility to provide a flooring system that meets current safety standards for slip resistant floors when using EpoxyDoc flooring systems.

RESPIRATORY AND SKIN PROTECTION

- 1) Use adequate ventilation when installing coatings.
- 2) Use protective clothing and gloves.
- 3) Use appropriate respirator during application in confined areas.
- 4) Avoid contact with skin
- 5) Some people may be allergic to floor coating resins and vapors