

TECHNICAL DATA- GE-C100

HIGH BUILD COLORED EPOXY COLOR COATING

DESCRIPTION:

GE-C100 is two component 100% solids epoxy colored seal coat that is used for applications where a thick build solid color floor topcoat is needed or as a primer coat for decorative concrete systems: flakes and metallics epoxy.

Standard colors are available in: White, off white, light gray, medium gray, tile red, and beige

SPECIFICATIONS:

RECOMMENDED FILM THICKNESS:

12-30 mils

COVERAGE PER GALLON:

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

MIX RATIO:

12 pounds (1 gallon) part A to 4.15 pounds (0.50 gallons) part B

SOLIDS BY WEIGHT:

100% (+/- 1%)

SOLIDS BY VOLUME:

100% (+/- 1%)

VOLATILE ORGANIC CONTENT:

Less than 2 g/l

SHELF LIFE:

1 year in unopened containers

FINISH CHARACTERISTICS:

Gloss (70-95 at 60 degrees @ glossmeter)

ABRASION RESISTANCE:

Taber abraser CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 32 mg loss

FLEXURAL STRENGTH:

5,400 psi @ ASTM D790

COMPRESSIVE STRENGTH:

9,100 psi @ ASTM D695 – 1/2 "X 1/2" bars

ADHESION:

450 psi @ elcometer (concrete failure, no delamination)

VISCOSITY:

Mixed = 1300-2300 cps (typical, most colors)

DOT CLASSIFICATIONS:

Part A "not regulated"

Part B "CORROSIVE LIQUID N.O.S., 8, UN11760, PGIII"

TENSILE STRENGTH:

4,800 psi @ ASTM D638

ULTIMATE ELONGATION:

3.1%

GARDNER VARIABLE IMPACTOR:

50 inch pounds direct – passed

HARDNESS:

Shore D = 80

PACKAGING

3 gallon kits (2.9 – 3.0 gallons net approximately)

15 gallon kits (14 – 15 gallons net approximately)

CURE SCHEDULE:

pot life – 1 1/2 gallon volume 30-50 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%

CHEMICAL RESISTANCE:

REAGENT	RATING
xylene	C
trichloroethylene	B
methanol	A
ethyl alcohol	B
skydrol	B
10% sodium hydroxide	E
50% sodium hydroxide	D
10% sulfuric acid	C
70% sulfuric acid	A
10% HCl (aq)	C
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.

PRIMER:

Recommended GE-C10W or GE-C100 (2 coats application).

TOPCOAT:

Polyurethane GU-20, GU-20W and Polyarspartic GP-20 recommended to use for increased chemical resistance or UV stability.

LIMITATIONS:

*Product is strictly for interior usage, gloss effect or color stability might be affected by environmental conditions like UV exposure, chemical exposure, high humidity, exposure to lighting such as sodium vapor lights.

*Colors may differ from batch to batch. We recommended to use GE-C100 from the same batch for an entire project.

*This high build epoxy is not UV color stable. Clear aliphatic urethane topcoats reduce color changes from UV light.

*Surfaces temperature must be 5°F above dew point.

* For the best results, apply with a 1/4" nap roller or squeegee.

*All new concrete must be cured for at least 30 days prior to application.

*Apply a GE-C10W water-base epoxy primer or 1 additional coat of this 100% high build epoxy before applying a thick coat of GE-C100.

*See reverse side for application instructions.

*Physical properties are typical values and not specifications.

*See reverse side for limitations of our liability and warranty.

MIXING AND APPLICATION INSTRUCTIONS (GE-C100)

1) **PRODUCT STORAGE:** Store GE-C100 high build colored epoxy coating in a room temperature area. Prolonged storage should be anywhere between 60- and 90-degree F (16-32 C). Low temperatures and/or temperature fluctuations may cause crystallization of the epoxy binder

2) **SURFACE PREPARATION:** Prepare surface according to the type of complete system to be applied. All dirt, oil, dust, sealers, paint and other contaminants shall be removed to assure proper bonding to the substrate. Use mechanical scarification or acid etching until a desirable result is achieved. Diamond grinding or shot blasting recommended for a best result. Patching may be required prior to application of 100% solid seamless epoxy coating. Make a test to determine that the concrete has an appropriate vapor barrier by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If after 24 hours the substrate is still dry under the plastic sheet, then the substrate has no signs of eventual hydrostatic pressure problems that may later cause disbanding. This product can be applied to a damp floor.

3) **PRIMING:** GE-100 pigmented epoxy coating may be applied as primer or with a suitable primer. See beginning for primer information. If a primer is not used, porous surfaces can cause outgassing, bumps, and a variety of product defects. Screen the primer coat with a 100 grit sanding screen on a rotational floor machine. This screening will ensure not only a good bond between coats, but also eliminate any debris or dust that may have settled onto the preceding coat as it was curing. Follow screening with vacuuming. Follow vacuuming with a micro-fiber wipe with a solvent such as xylene or acetone.

4) **MIXING & HANDLING:** GE-C100 high build colored epoxy coating has a mix ratio of 12# part A to 4.15# part B (2 parts A to 1 part B) by volume for standard colors. Standard packages are in pre-measured kits and should be mixed as supplied. We highly recommend measuring carefully and precisely, not just estimated. Pour 1part B to 2 parts A. After combining both parts, mix them well with slow speed mixing equipment (like a jiffy mixer) until the material is thoroughly mixed for 3 minutes and has no streaks. After mixing, transfer the mixed material to another pail and mix again. This is done to avoid unmixed material ruining your work. Your material is now ready to be applied on the primed surface. Improper mixing may result in product failure. Once A & B parts are mixed, the catalyzed GE-100 high build pigmented epoxy should be placed on floor immediately. Left epoxy in pail will cure at accelerated rate. Do not leave pail upside down to drain onto floor. Any un-mixed portion of A or B that may have accidentally been placed onto side of pail can now drain down onto the floor, creating a spot that will not cure.

5) **PRODUCT APPLICATION:** Spiked shoes are required throughout application. The material can be applied by brush, roller or a serrated squeegee as long as it is back rolled, and the appropriate thickness is maintained. Keep temperatures and relative humidity within the recommended ranges during both the application and curing process. If over aggressive mixing or concrete conditions cause air entrapment, use an air release roller tool on your coat. GE-C100 colored epoxy coating comes in White, off white, light gray, medium gray, tile red, and beige or any other custom color. When using as a broadcast binder, begin with a test area to ensure desired results.

6) **RECOAT OR TOPCOATING** If you decide to recoat or topcoat this seamless epoxy binder, you must first be sure that the coating has tacked off before recoating. Always remember that colder temperatures will require more cure time prior to recoating or topcoating. Before recoat or topcoat check the coating to ensure no epoxy blushes have developed (deglossing, or a white, greasy film). Remove them before recoating or topcoating. If Top Coat has cured beyond 12 -24 hours or if dust or de-bris has settled into it as it cured, it must be screened with a rotational floor machine equipped with a 100 grit sanding screen. Follow screening with vacuuming. Follow vacuuming with a micro-fiber wipe with denatured alcohol.

There are several choices that have varying advantages for the Top Coat:

- **GU-20** – Polyurethane SB – solvent based, high gloss or satin
- **GU-20W** – Polyurethane WB – water-based, gloss or flat
- **GP-20** – Polyaspartic – quick dry, moderate build, high gloss

7) **CLEANUP:** Use xylol.

8) **FLOOR CLEANING:** Caution! Some cleaners may alter the color, and we strongly recommend testing each cleaner in a small area.

9) **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.***