

TL300 EPOXY COATING

TECHNICAL DATA SHEET



PRODUCT DESCRIPTION: EverGlow TL300 Epoxy Coating is a two component 100% solids epoxy coating with UV resistance additives and EverGlow photoluminescent TL300 pigment. TL300 is designed to meet the luminance code requirements for luminous egress path marking systems when mixed and applied as directed on a clean, dry horizontal surface with an appropriate primer coating.

RECOMMENDED FOR: Exit stairs, stair nosings, landings and corridors. Also recommended for floors and walkways in commercial and industrial facilities. Designed to meet code requirements when one (1) coat is applied with a brush or roller to a thickness of 10 mils (dry coating thickness). At this coating thickness, each TL300 kit covers approximately 100 square feet – 1 inch wide x 1,200 feet, 2 inches wide x 600 feet, 4 inches wide x 300 feet, 6 inches wide x 200 feet, etc.

LUMINANCE PERFORMANCE: EverGlow TL300 Epoxy Coating is designed to be applied over an appropriate primer coating which has been applied over a properly prepared and cured aluminum, steel or concrete surface. The coating is translucent – the primer coating will show through the desired 10 mil TL300 coating. For best luminance performance (visibility in complete darkness), use a gloss white primer. If greater visibility is required in normal lighting, use a gloss yellow primer.

Because of the high pigment loading, and the low viscosity of TL300, this epoxy will sag on vertical or inclined surfaces unless applied in very thin coating thickness, and multiple coatings will be required to meet the luminance requirements of building & fire codes.

EverGlow TL300 Epoxy Coating is designed to use in a minimum illumination of 1 foot-candle of fluorescent lighting, when measured at floor level. This coating is designed to exceed the luminance requirements for luminance egress path marking systems as required by building and fire codes based on the IBC-2009, IFC-2009 and NFPA 101 (2009). Luminance of EverGlow TL300 Epoxy Coating will exceed 5 mcd/m² after 90 minutes in the dark (and exceed 30 mcd/m² after 10 minutes in the dark) when tested according to ASTM E2072 and E2073. Local jurisdictions may have other requirements for these markings, beyond those described in the International Building Code, International Fire Code, or NFPA Life Safety Code.

LIMITATIONS:

- 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.
- Colors may vary from batch to batch.
- Substrate temperature must be at least 5°F above dew point.
- For best results, apply with a brush or 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
- See EverGlow instructions for mixing and application.
- Physical properties are typical values and not specifications.

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PHYSICAL PROPERTIES:

Solids by Weight:	100%
Solids by Volume:	100%
Volatile Organic Compounds (VOC):	Nearly zero pounds per gallon
Recommended Film Thickness:	10 mils
Coverage per TL300 Kit:	100 square feet per kit (approximately)
Packaging Information:	6 pound TL300 kit 6 pints (approximately 0.75 gallons) 2 pints, Part A Epoxy (resin) 1 pint, Part B Epoxy (hardener) 3 pounds TL300 Pigment (Designed to be mixed at the application site.)
Mix Ratio:	2 Pints (2 pounds) Part A with 3 pounds Pigment 1 Pint (1 pound) Part B
Shelf Life:	1 year in unopened containers
Finish Characteristics:	Gloss 60 to 90 @60 degrees
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
Application Temperature:	55-90 F
Cure Schedule:	
pot life – 0.75 gallon volume	25-35 minutes @ 70 F
tack free (dry to touch)	7-9 hours @ 70 F
recoat	12-16 hours @ 70 F
light foot traffic ¹	16-18 hours @ 70 F
full cure (heavy traffic)	2-7 days @ 70 F

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CHEMICAL RESISTANCE:

REAGENT	RATING
butanol	C
xylene	C
1, 1, 1 trichloroethane	B
MEK	A
methanol	A
ethyl alcohol	C
skydrol	B
10% sodium hydroxide	E
50% sodium hydroxide	D
10% sulfuric acid	C
10% HC1 (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.

ADDITIONAL INFORMATION:

1) **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.

2) **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.

3) **PRODUCT MIXING:** **EverGlow TL300 Epoxy Coating has a 30 minute Pot Life.** This product has a mix ratio of 1 pound of Part B to 2 pounds of Part A to 3 pounds of TL300 Pigment. 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 components are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. During application, mix as necessary to keep the pigment uniformly dispersed. The properly mixed coating is now ready to be applied onto the primed substrate. Improper mixing may result in product failure.

4) **PRIMING:** A suitable primer should be used before applying this product. If a primer is not used, more porous substrates may cause outgassing and possible surface defects.

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5) **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. Contact your representative for details as necessary.

6) **RECOAT OR TOPCOATING:** If you opt to recoat 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 can commence. Before recoating, check the coating to insure no epoxy blushes were developed (a whitish, greasy film or deglossing). If a blush is present, it must be removed prior to recoating. Many epoxy coatings and urethanes are compatible for use as a topcoat for this product as well as multiple coats of this product.

7) **CLEANUP:** Use xylol.

8) **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.

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.

CAUTION:

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.