

# 100% Epoxy #2870

100% Solids, Two-Component Epoxy Coating for Concrete

## Features:

- Has excellent chemical and corrosion resistance
- Highly resistant to scrubbing and scuffing
- High gloss, epoxy seal coating
- Can be used as a coating or filled with aggregate
- Easy to maintain
- For interior use



## Description:

100% EPOXY is a two-component, 100% solids epoxy seal coat that can be used either as a coating or filled with aggregate to provide an endless array of color schemes or patterns. It is designed to protect and beautify interior concrete/masonry. It dries to a heavy-duty, high-gloss film with outstanding resistance to wearing, abrasion and chemicals.

## Applications:

- Commercial Buildings
- Industrial Plants
- Hospitals
- Schools/Bus Barns

## Product Properties:

Solids by Weight:	100%
Solids by Volume:	100%
Film Thickness:	16-18 mils
Coverage per Gal:	90-100 sq ft/gal @ 16-18 mils
Shelf Life:	1 year in unopened containers
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)
Tensile Strength:	7,600 psi @ ASTM D638
Ultimate Elongation:	4.1%
Gardner Variable Impactor:	50 inch pounds direct – passed
Hardness:	Shore D = 81

## 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
70% sulfuric acid	A
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.

## Product Characteristics:

	A	B
Appearance:	Low viscosity liquid	Liquid
Color:	Amber, clear	Amber, clear
Boiling Point/Range:	200°+F	155°F - 401°F
Specific Gravity:	1.1	1.0
Solubility:	Negligible	Negligible
Flash Point:	200°+F, Method: Seta flash	200°+F, Method: Seta flash
VOC:	Less than 2 g/l	Less than 2 g/l
Viscosity:	Mixed = 700-1000 cps (typical)	Mixed = 700-1000 cps (typical)
Storage:	Store in a cool, dry place. Seal all partially used containers.	Store locked up. Reseal partially used containers. Properly label all containers.
<b>Transport Information:</b>		
Proper Shipping Name:	Not regulated.	Corrosive Liquid N.O.S.
UN Number:	Not regulated.	UN1760
Class:	Not regulated.	8
Packing Group:	Not regulated.	III

### Cure Schedule:

Pot Life – 1 1/2 gallon volume:	20-30 minutes @70°F
Tack Free (dry to touch)	6-8 minutes @70°F
Recoat or Topcoat:	10-16 hours @70°F
Light Foot Traffic:	14-18 hours @70°F
Full Cure (heavy traffic):	2-7 days @70°F

### Application Temperature:

55-90°F

### Directions:

**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.

**Mixing:** This product has a mix ratio of 9.0# Part A to 4.15# Part B. Standard packages are in premeasured 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. Improper mixing may result in product failure.

**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.

**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.

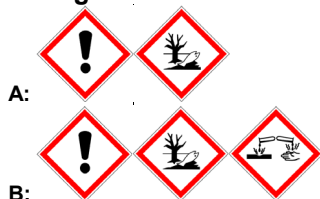
**Recoat or Top Coating:** If you opt to recoat or topcoat this product, you must first be sure that the coating has tacked off before recoating. Always remember that colder temperatures will require more cure time for the product before recoating or topcoating can commence. Before recoating or topcoating, check the coating to insure 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.

### Pictograms:



### Signal Word:

A & B: Danger

### Personal Protective Equipment Required:



### 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. Therefore, use only product from the same batch for an entire job.
- This product is not UV color stable. Clear aliphatic urethane topcoats reduce (UV light) color changes.
- Substrate temperature must be 5°F above the dew point.
- For best results, apply with a 1/4" nap roller.
- All new concrete must be cured for at least 30 days prior to application.
- Apply a suitable primer before using this product.
- Physical properties are typical values and not specifications.