



Product Data Sheet

Hi-Build Epoxy - 3900 Series

Product Description

This material is a high-solids polyamide cure epoxy coating that provides room temperature cured finishes. Polyamide cured epoxies combine outstanding resistance to solvents, tap water, and most forms of shock and abrasion.

Where to Use

Excellent adhesion and flexibility are obtained over ferrous and non-ferrous metals and "green" or dry concrete floors. If desired or warranted by the service environment, can be top coated with Ancothane #4900 polyurethane.

Product Characteristics

Color #3902 - White, Standard and Custom colors

Gloss High Gloss

Architectural and Industrial Maintenance Category Industrial Maintenance Coatings

Drying Time

Temperature	To Touch	Tack Free	Recoat Window*	To Handle	Full Cure
40 °F	6 hours	2 days	8 hours – 4 days	4 days	> 14 days
75 °F	2 hours	7 hours	4 hours – 2 days	12 hours	8 days
100 °F	90 minutes	4 hours	3 hours – 1 day	7 hours	6 days

*If painting in direct sunlight, the recoat window will be shortened.

As epoxies cure, they achieve higher levels of crosslinking. New layers of paint bond less well to the cured coat as time progresses and polymer entanglement into the base coat becomes more and more restricted. This is why the next coat must be applied within the recoat window. If recoating after the recoat window, the surface must be roughened through sanding to achieve intercoat adhesion.

Very rapid cures can be obtained by force drying or baking the epoxy.

Preparation & Priming

Surface Preparation **Old Work:** Prior to application, ensure that the substrate is free of any contaminants according to SSPC-SP1. All damaged areas should be repaired and existing paint should be in good condition. Test existing paint for lifting and if present, it must be removed or application of a barrier primer must be used.

New Work: For best performance on steel, the surface should be blasted to a minimum SSPC-SP10, including the removal of all mill scale. Prior to blasting, remove all flux and scab from the welding and grind smooth all rough weld seams and sharp edges. Remove any grease, oil or dirt with solvent or chemical cleaner before blasting. The surface should be coated immediately after blasting.

Concrete Floors: Old concrete floors must be tested for lifting and old paint removed if not resistant to epoxy. The surface must be cleaned of all dirt, oils, or other contaminants with a non-soapy detergent; thoroughly rinsed and dried. New floors must be cured. All floors then must be etched with 3% solution of Muriatic Acid, then thoroughly rinsed and dried.

Primer Coats For maximum protection use Anchor #3900 Hi-Build Epoxy primer. Consult your Anchor representative for specific job recommendations.

Mixing & Application

Mixing/Mix Ratio Mix one part, by volume, of #3906 into one part Hi-Build Epoxy. Hand or mechanically agitate being careful not to mix so fast that air is entrapped. Allow to stand 30 minutes before applying.

Thinning This coating is VOC compliant; only thin if permitted by federal, state and local regulations. If necessary, use Anchor #3905.

Surface Temperature Minimum 55°F Maximum 110°F

Recommended Thickness 2 mils dry per coat minimum, 2-4 coats recommended

Theoretical Coverage 805 ft²/gallon at 1 mil dry, assuming no application losses. Coverage will vary depending on color, surface texture and application technique.

<u>Coverage Rates per Coat</u>	<u>Dry Mils</u>	<u>Wet Mils</u>	<u>Ft²/gal</u>
<u>Suggested</u>	3.0	6.0	268
<u>Minimum</u>	2.0	4.0	403
<u>Maximum</u>	4.0	8.0	201

Pot Life After #3906 is mixed into the epoxy, the mixture must be applied within 24 hours. This assumes the mixture is at 77°F. Pot life lengthens with cooler temperatures and shortens with warmer temperatures.

Mixing & Application Continued

<u>Application Equipment</u>	<u>Airless Spray</u>	Pressure	1800-2400 psi
		Tip	0.013"-0.017"
	<u>Conventional Spray</u>	Air Pressure	75-100 psi
		Fluid Pressure	10-20 psi
	<u>Brush</u>	Recommended for small areas only. Use a high quality natural china bristle brush.	
	<u>Roller</u>	Use 3/8" or 1/2" synthetic nap covers.	

Application Considerations This product can be applied by brush, roller or spray equipment. The cure time is directly affected by the substrate temperature. The coating will not cure where the substrate is below 50°F; at 70°F the cure time is approximately 7 days. Avoid applications where the relative humidity is above 85%. Apply in wet coats to avoid dusting. When spraying, use a cross hatch method, overlapping each pass 50%. On a derusted surface, the application of a dry film thickness of at least 2.0 mils is recommended.

Technical Information

Solids by Volume 50.19% – Mixed with Activator – Varies by Color

AIM Category VOC Limit 3.8 lb/gal (450g/l)

Actual VOC 3.44 lb/gal (412 g/l) – Mixed – Varies by Color

Density 10.05 lb/gal (1204 g/l) – Mixed – Varies by Color

Packaging A two gallon kit consist of a 1 gallon container of epoxy 100% full and a 1 gallon container of #3906 100% full. Mixing the #3906 into the epoxy, in a separate container, yields two mixed gallons. A ten gallon kit consists of a 5 gallon container 100% full of epoxy and a full 5 gallon container of #3906. Mixing the #3906 into the epoxy, in a separate container, yields ten mixed gallons. This product is also sold in quart quantities.

Heat Resistance 250°F Continuous, 350°F Spikes

Clean-up & Storage

Cleanup Clean equipment thoroughly before and immediately after, using Anchor #3905

Storage Temperature Minimum 35°F Maximum 110°F

Shelf Life Under Normal Conditions (Unopened) – Two Years

Safety & Important Information

WARNING! FLAMMABLE LIQUID AND VAPOR. VAPOR HARMFUL. CAUSES EYE IRRITATION. CONTAINS: ETHYL BENZENE, METHYL ISOBUTYL KETONE AND XYLENE. Vapor harmful. May affect the brain or nervous system causing dizziness, headache or nausea. Causes nose, eye, skin and throat irritation. May be harmful if absorbed through skin. Harmful if swallowed. NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Keep away from heat, sparks and flame. Vapors may cause flash fire. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources or ignition during use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation. **Use only with adequate ventilation.** Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. **KEEP OUT OF REACH OF CHILDREN.**

WARNING! If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead. **WARNING!** Sanding or scraping pressure treated lumber may be hazardous; wear appropriate protection.

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LIMITED WARRANTY: The technical data on this label or on other data is true and accurate to the best of our knowledge. We guarantee our products to conform to ANCHOR PAINT MFG. CO. quality control standards. Due to misuse in handling, storage, application and workmanship or variables such as weather or surface integrity that are beyond our control, Anchor Paint does not authorize any representative to make any warranty or merchantability of fitness of this product. Any liability whatsoever of Anchor Paint Mfg. Co. to the buyer or user of this product is limited to the purchaser's cost of the product itself.