Manufacturers of High Performance Industrial Coatings

AG-591 HI-BUILD 100% SOLIDS
WET SURFACE EPOXY COATING

PRODUCT DESCRIPTION

A 100% solids, two component Epoxy Coating. AG-591 provides very low permeability along with excellent impact and abrasion resistance. Formulated with a unique moisture insensitive polymer, AG-591 may be applied on wet surfaces, or underwater without effect on cure. A special resin modification produces a low modulus, flexible film, making AG-591 ideal for painting over existing sound paint without "lifting". Recommended for steel and concrete surfaces. AG-591 can be rolled without any solvent.

PRODUCT FEATURES

1. Self-priming on steel and on most concrete applications.
2. Ideal for marginally prepared surface.
3. High film build up to 20 mil DFT per coat on horizontal surfaces.
4. May be applied on wet or under water surfaces.
5. Cures down to 35°F.
6. Available in an Antimicrobial formula.
7. Can be rolled with no solvent.
8. Outstanding impact and abrasion.
9. Excellent coating for manholes.
10. Meets all EPA and other air pollution regulations.

TECHNICAL DATA

COLORS: White, Lt. Gray, Med. Gray

FINISH: Gloss

VOLUME SOLIDS: 100%

COVERAGE 175 sf/gal/coat typical application

MAX/MIN FILM THICKNESS: Two coats
At 8-20 dry mils @ 80-200 sq. ft. per gal.

MIXING RATIO: 3:1 by volume. Mix 3 parts Base (Part A) with 1 part Hardener (Part B)

INDUCTION TIME: None

POT LIFE: 40-50 minutes @75ºF

CLEAN UP: SA-17 or S-74

APPLICATION: Spray, roll or brush

APPLICATION TEMPERATURE: 40ºF – 120ºF

DRY SERVICE TEMPERATURE: 170ºF

SHELF LIFE: 1-year minimum

PACKAGE: 1 gallon and 4 gallon kits

V.O.C.: 0 GMS/L

THINNING: S-74 Reducer

* Gloss will exhibit slight variation in brush or rolled film due to orientation of fillers. This does not affect product performance.

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ARMOR GARAGE LLC

CHEMICAL RESISTANCE

Acetic Acid, 5%
Ammonium Hydroxide, 10%
Aqueous Salt Solutions
Black Liquor
Brine
Crude Oil
Distilled Water
Fresh & Salt Water
Gasoline
Hydrochloric Acid, 32%
Hydrogen Peroxide, 5%
Hydrogen Sulfide
Jet Fuel
Lactic Acid
Sodium Hypochlorite, 5%
Sodium Hydroxide, 50%
Sulfuric Acid, 50%
Xylene

PRODUCT USES

AG-591 is a chemical resistance Epoxy coating ideal for use in paper and pulp mills, chemical processes, waste water treatment facilities, fertilizer plants, electric generating stations, ore recovery facilities, mining sites, refineries, dairies, laundries, dams, marine environments such as pilings, submarine pens, wet ends of paper machines, bleach plants, manholes, pits, sumps, cooling towers, clarifiers, piers, underwater applications, etc., and all kinds of wet processes.

Ideal for upgrading the performance of existing "old paint" surfaces, and for remedial painting of "less-than-ideal" surface preparations or conditions during application. Inclement weather will seldom interfere with paint schedules. When mixed with a blend of silica flour and sand, AG-591 may be used to repair underwater, or below grade leaks in steel or concrete structures.

Perfect for use in conjunction with wet abrasive or high pressure water blast preparation. AG-591 may be applied without waiting for the surface to dry, therefore, elimination "fall out" contamination.

SURFACE PREPARATION

Best method is a near white abrasive blast (SSPC-SP10) but AG-591 will perform well over minimally prepared surfaces depending on service requirements. Because of the lack of "standards" for minimal surface preparation, test applications should be made to determine adequate surface cleanliness and compatibility with existing paint.

a. **Steel**: Remove oil, grease and other chemical contaminants by solvent wipe or steam cleaning. Abrasive blast to a "Commercial" (SSPC-SP6) or "Near White" (SSPC-SP10) metal finish.

b. **Galvanized Steel/Aluminum**: Solvent clean per SSPC-SP1 or steam clean. Sweep blast to achieve a minimum 1 mil profile.

c. **Previously Painted Surfaces**: Solvent clean per SSPC-SP1 and/or power wash. Remove loose existing paint by wire brush or other hand tools. Feather edges. Make test application to check for compatibility.

d. **Concrete**: All new concrete must be cured at least 28 days. For on-grade concrete slabs, check that a moisture barrier film has been used. Testing may be necessary. Check for the presence of hardeners or residual forming membrane curing agents. Repair all cracks, bug holes, spalled concrete, voids and expansion joints.

MIXING INSTRUCTIONS

Stir each component to a uniform consistency with an explosion proof variable speed drill with Jiffy mixer. Then mix 3 parts Base A with 1 part Hardener B for 3 minutes. AG-591 may be reduced up to 20% with S-74 Reducer per mixed gallon. Do not substitute reducers.

ARMOR GARAGE LLC

V.O.C.

Unthinned	Thinned 5%	Thinned 10%	Thinned 20%
0 lbs/gl (0 GMS/Liter)	1.28 lbs/gl (154 GMS/Liter)	1.52 lbs/gl (183 GMS/Liter)	1.95 lbs/gl (234 GMS/Liter)

APPLICATION PROCEDURE

Airless Spray	Graco	Conventional Spray	DeVilbiss
Gun	Silver Plus	Gun	MBC 510 or JGA
Pump	33:1 Extreme	Fluid Tip	D
Tip Range	019"-.025"	Air Cap	64 or 704
Hose	1/2" ID	Atomizing Pressure	40 psi
Pressure	2500-3000 psi	Pot Pressure	50 psi
		Hose	1/2" ID

When spraying, use a 50% overlapping crosshatch pattern to minimize the occurrence of pinholes. Do not apply to surfaces below 40°F or above 120°F. Do not apply over dew or frost. The surface temperature should be at least 5° above the Dew Point.

3. **Roller** - use a medium nap solvent resistant phenolic core roller.

4. **Brush** - use a pure bristle brush.

CURE TIME

TEMPERATURE	TACK FREE	MINIMUM RECOAT	MAXIMUM RECOAT
90°F	1 - 2 hours	5 - 6 hours	3 days
75°F	3 - 4 hours	7 - 8 hours	7 days
45°F	8 - 12 hours	36 - 48 hours	10 days

Times may be longer for thickness above 5 dry mils. For safety and proper product curing, good ventilation is necessary when painting indoors or in confined areas. Be sure the batch numbers are all the same to provide uniform color. Epoxy coatings may yellow or darken during application and after final cure. This will affect the color but will have no effect on the performance of the product. Heaters that emit carbon dioxide and carbon monoxide can cause the coating to yellow.

CAUTIONS

AG-591 Base is combustible. Keep away from all sources of ignition during mixing, application and cure. AG-591 Hardener (Part B) is corrosive and can cause eye and skin irritation as well as allergic reactions. The use of goggles, fresh air masks or NIOSH approved respirators, protective skin cream and protective clothing is a recommended standard practice when spraying coatings. Proper ventilation is always required. This product is sold without warranty as to performance expressed or implied. Users are urged to make their own tests to determine the suitability for their particular conditions.

SEE MATERIAL SAFETY DATA SHEET FOR FULL SAFETY PRECAUTIONS.
FOR PROFESSIONAL AND INDUSTRIAL USE ONLY
KEEP AWAY FROM CHILDREN. NOT FOR RESIDENTIAL USEAGE.

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