

Amercoat® One – Single Component Epoxy

Multi-purpose single component epoxy

Product Data/ Application Instructions

- Unique epoxy formation
- Single pack ease of use
- Durable epoxy performance
- Direct-to-metal application

Typical Uses

- OEM applications
- Industrial maintenance and repair
- Marine and off-shore
- Touch up of field welds

Surface Preparation

Coating performance is, in general, proportional to the degree of surface preparation. Prior to coating, surface must be clean, dry, undamaged and free of all contaminants, including salt deposits. Areas to be primed - round off all rough welds and sharp edges, remove weld spatter.

Steel – New without pits or depressions: blast SSPC-SP6.

Previously painted or pitted steel: blast SSPC-SP6 or 7. For mild exposures: power tool cleaning SSPC-SP3 is acceptable.

Blast to achieve 1- to 2-mils (25- to 50-microns) profile as determined with a Keane-Tator Surface Profile Comparator, Testex Tape or similar device. Remove abrasive residue and dust from surface. If profile is greater, additional thickness may be needed.

Aluminum – Remove oil, grease or soap film with a neutral detergent or emulsion cleaner. Apply chromate-type conversion treatment, such as Alodine® 1200, Alumiprep® or equivalent, or lightly blast with fine abrasive.

Galvanizing – Remove any oil or soap film with neutral detergent or emulsion cleaner. Use zinc treatment such as Galvaprep® or equivalent or sweep blast using a fine abrasive.

Systems Using Amercoat One

1st Coat	2nd Coat
Amercoat One	PSX 1001
Amercoat One	Amercoat 5450
Amercoat One	Amershield
Amercoat One	PSX 700
Amercoat One	Amercoat 450A Series

Physical Data

Finish	Low Gloss		
Color	Red, Black, White and Gray		
Components	1		
Curing mechanism	Chemical reaction, solvent evaporation		
Volume solids (ASTM D2697 modified)	63 ± 3%		
Dry film thickness per coat	4 to 6 mils per coat (100 to 150 microns)		
Coats	1 or 2		
Theoretical coverage @ 5 mils (125 microns)	ft ² /gal 202	m ² /L 71	
	lb/gal 2.58	g/L 309	
VOC	2.58		
Temperature Resistance	Wet °F 100	°C 38	Dry °F 250 °C 121
Flash point (SETA)	°F	°C	
Amercoat One	112	44	
Amercoat 65	78	25	
Amercoat 101	140	60	

Application Data

Applied over	Steel or concrete		
Method	Airless spray, brush, roller		
Environmental conditions			
Temperature	°F	°C	
material	50 to 90°F	10 to 32	
air	50 to 100°F	10 to 38	
surface	40 to 100°F	10 to 38	
Relative humidity	50% to 85%		
Drying time (ASTM D1640) @ 6 mils, DFT (hours)		°F/°C	
	90/32	70/21	50/10
touch through	4	8	16
Topcoat or recoat time minimum (hours)	4	8	16
Topcoat or recoat time maximum (days)	7	14	21
Pot Life	Not applicable*		

* = product should be sealed once opened to minimize moisture exposure

Application Equipment

The following is a guide; suitable equipment from other manufacturers may be used. Changes in pressure, hose and tip size may be needed for proper spray characteristics.

Airless spray – Standard equipment such as Graco Bulldog Hydra-spray or larger with a 0.017- 0.019 inch fluid tip.

Conventional spray – Industrial equipment such as DeVilbiss MBC or JGA spray gun. Separate regulators for air and fluid pressure, mechanical pot agitator and a moisture and oil trap in the main air supply line are recommended.

Brush – Natural bristle. Maintain a wet edge.

Roller – Solvent resistant. Level any air bubbles with a bristle brush. (1/4" - 3/4" nap)

Power mixer – Such as Jiffy Mixer powered by an air or an explosion-proof electric motor.

Application Procedure

1. Clean equipment with thinner or Amercoat 12 before use.
2. Stir material thoroughly with an air or explosion-proof power mixer until uniformly blended.
3. Thinning is normally not required. If necessary for workability, thin with Amercoat 65 or 101 up to ½ pint per gallon of Amercoat One for airless and conventional spray.

Temperature	Thinner
below 70°F (21°C)	Amercoat 65
above 70°F (21°C)	Amercoat 101

4. Apply a wet coat in even, parallel passes; overlap each pass 50 percent to avoid holidays, bare areas and pinholes.
5. Double coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc.
6. Random pinholes, holidays and small damaged areas can be touched up by brush when film is dry to touch. Larger areas should be resprayed.
7. Clean all equipment with thinner or Amercoat 12 immediately after use.

Shipping Data

Packaging	1 gal	5 gal
Shipping weight (approx)	lb	kg
1-gal can	12	5.6
5-gal can	61	27.7

Shelf life when stored indoors at 40 to 100°F (4 to 38°C) cure, resin and paste 1 year from shipment date

Numerical values are subject to normal manufacturing tolerances, color and testing variances. Allow for application losses and surface irregularities. See application instructions for complete information and safety precautions. The product is photochemically reactive as defined by the South Coast Air Quality Management District's Rule 102 or equivalent regulations.

Safety Precautions

Read material safety data sheet before use. Safety precautions must be strictly followed during storage, handling and use.

CAUTION – Improper use and handling of this product can be hazardous to health.

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: implementation of proper ventilation, use of proper lamps, wearing of proper protective clothing and masks, tenting and proper separation of application areas. Consult your supervisor. Proper ventilation and protective measures must be provided during application and drying to keep spray mist concentrations within safe limits and to protect against toxic hazards. Necessary safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces, such as tank interior and buildings.

This product is to be used by those knowledgeable about proper application methods. PPG makes no recommendation about the types of safety measures that may need to be adopted because these depend on application environment and space, of which PPG is unaware and over which it has no control.

If you do not fully understand these warnings and instructions or if you cannot strictly comply with them, do not use the product.

Note: Consult Code of Federal Regulations Title 29, Labor, parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable federal, state and local regulations on safe practices in coating operations.

This product is for industrial use only. Not for residential use.



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