



Amercoat 310

High Solid Polyamide Cured Epoxy

Product Data/ Application Instructions

- **Excellent durability in both marine and industrial environments**
- **Compatible over inorganic zincs.**
- **Can be recoated with various two component and conventional coatings even after long weathering periods**

Amercoat 310 is a high build polyamide epoxy with high solids content designed for industrial and marine use. It adheres strongly to primed steel and inorganic zinc silicate coatings on new construction and field maintenance projects. Amercoat 310 provides an excellent barrier to corrosion. Amercoat 310 can be applied by a variety of spray methods to produce a smooth fast-drying high build film. Amercoat 310 may be over coated with itself in non-immersion conditions for an unlimited period..

Typical uses

MARINE- Decks, hulls, superstructures of ships, barges and workboats.

INDUSTRIAL – Tank exteriors, structural steel pipes in chemical plants, refineries, pulp and paper mills and waste water treatment plants. Offshore platforms, jetties and other structures exposed to severe weathering, water, salt spray. Amercoat 310 can be top coated with amongst others PSX 700 and Amercoat 450S.

Physical Data

Finish.....	flat	
Colour		
Amercoat 310	selected range of colours	
Components	2	
Mixing ratio (by volume)		
Resin.....	4 part	
Cure	1 part	
Curing mechanism.....	solvent release and chemical reaction between components	
Volume solids	80% (ISO 3233)*	
VOC**		
EC SED 1999/13/EC	126 g/kg (240 g/l)	
Dry film thickness	75 – 150 µm per coat	
	(3 –6 mil per coat)	
Number of coats	1 or 2	
Theoretical coverage		
At 75 microns/4 mil dft	10.6 m ² /l	432 ft ² /gal
Temperature resistance.....	Dry	
	°C	°F
Continuous.....	120	248
Flashpoints	°C	°F
Cure	20	68
Resin.....	28	82
Thinner 91-92	21.5	72
Thinner 90-53	25	77
Thinners	Thinner 91-92	
Cleaner.....	Thinner 90-53	

* Volume solids is measured in accordance with ISO 3233. Slight variations ±3% may occur due to colour and testing variances.

** VOC figures are quoted according to both the EC directive 1999/13/EC which are theoretically calculated figures.

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Surface Preparation

PRIMED STEEL – Prepare surface in accordance with application instructions for the specific primer being used. Be sure primer is clean and dry when Amercoat 310 is applied. Remove all loose rust, dirt, moisture, grease or contaminants

REPAIR – Prepare damaged areas to original surface preparation specifications, feathering edges of intact coating. Thoroughly remove dust or abrasive residue before touch up and repair with appropriate prime coat..

Application Equipment

The following equipment is listed as a guide and suitable equipment from other manufacturers may be used.

Adjustments of pressure and change of tip size may be needed to obtain the proper spray characteristics.

AIRLESS SPRAY Standard airless spray equipment, such as Graco, DeVilbiss, Nordson-Bede, Spee-Flo or others having a 0.015 to 0.021 inch (0.38 to 0.53 mm) fluid tip. **CONVENTIONAL SPRAY** Industrial equipment such as DeVilbiss MBC or JGA gun with 78 or 765 air cap and 'E' fluid tip and heavy mastic spring or Binks No. 18 or 62 with a 66 x 63 PB nozzle setup. Separate air and fluid pressure regulators, mechanical pot agitator and a moisture and oil trap in the main air supply line are recommended.

MIXER Use power mixer powered by an air motor or an explosion proof electric motor.

Application Data

Substrate	Primed steel
Surface preparation	
Primed steel	Abrasive blast cleaning
Application method	Airless or conventional spray. Touch-up of small areas can be made by brush or roller.
Mixing ratio (volume)	
Resin	4 parts
Cure	1 part

Environmental conditions		
Air temperature	5-50 °C	41-122 °F
Surface temperature	5-50 °C	41-122 °F

Surface temperature must be at least 3°C / 5°F above the dew point to prevent moisture condensation on the surface.

Potlife (°C/°F)	32/90	21/70	10/50
	3 hrs	6 hrs	12 hrs

Drying times (°C/°F)	32/90	21/70	10/50
Dry to touch	2 hr	3 hrs	6 hrs
Dry through	6 hrs	8 hrs	24 hrs

Recoat or topcoat times (°C/°F)	32/90	21/70	10/50
Minimum time	6 hrs	8 hrs	24 hrs
Maximum time	not limited		

Maximum recoating/topcoating time intervals are dependent on temperature, degree of weathering, type of topcoat, and service conditions of the complete coating system. Consult your PPG representative for specific recommendations.

Drying times are dependent on temperature, ventilation and film thickness.

Thinner Thinner 91-92

Equipment cleaner Thinner 90-53

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Application Procedure

Amercoat 310 is packaged in the proper mixing proportions of resin and cure.

Resin	16 L in 20 L can
Cure	4 L in 4 L can
Thinner:	Thinner 91-92
Cleaner:	Thinner 90-53

1. Flush equipment with recommended thinner before use.
2. Stir resin (in the larger container) to an even consistency with a power mixer.
3. Add cure to resin solution and continue stirring for 5 minutes.

NOTE: Since the potlife is limited and shortened by high temperatures, do not mix more material than will be used in 3 hours at 20°C.

4. Thin only if necessary for workability, add up to 10% by volume of thinner.
5. Apply a wet coat in even, parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays. When applying directly over inorganic zincs at full thickness, bubbling may occur. A test patch is recommended and if bubbling occurs, apply a "mist coat". Consult your PPG representative for further information.
6. Double coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc.
7. Application at 125 µm wet film thickness will normally provide 100 µm dry film.
8. Check thickness of dry coating with a non-destructive dry film thickness gauge, such as Mikrotest or Elcometer. If less than specified thickness, apply additional material as needed.
9. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas by spray.
10. In confined areas ventilate with clean air during application and drying until all solvents are removed. Temperature and humidity of ventilating air must be such that moisture condensation will not form on surface. For conventional spray, use adequate air pressure and volume to ensure proper atomisation. Normal recommended dry film thickness is 75 to 150 µm.
11. Clean all equipment with recommended thinner immediately after use or at least after each working day or shift. When left in spray equipment, Amercoat 310 will cure and cause clogging.

Shipping Data

Packaging 20 l

Resin.....	16 L in 20 L can
Cure	4L in 4 L can

Shelf life

Resin and cure at least 12 months

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Caution

This product is flammable. Keep away from heat and open flame. Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

1. circulate adequate fresh air continuously during application and drying;
2. use fresh air masks and explosion proof equipment;
3. prohibit all flames, sparks, welding and smoking.

Do not empty into drains. Take precautionary measures against static discharges. For specific information on hazardous ingredients, required ventilation, possible consequences of contact and safety measures see Safety Data Sheet.

Safety

Since improper use and handling can be hazardous to health and cause of fire or explosion, safety precautions included with Product Data/Application Instruction and Material Safety Data Sheet must be observed during all storage, handling, use and drying periods.

Warranty

PPG warrants its products to be free from defects in material and workmanship. PPG's sole obligations and Buyer's exclusive remedy in connection with the products shall be limited, at PPG's option, to either replacement of products not conforming this warranty or credit to Buyer's account in the invoiced amount of the non-conforming products. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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To avoid any confusion that may arise through translation into other languages, the English version of the Product Data/Application Instructions will be the governing literature and must be referred to in case of deviations with product literature in other languages.

Condition of Sale

All our transactions are subject to our Terms and Conditions of Sale.