

Amercoat® 137

Epoxy primer

Product Data/ Application Instructions (For Marine & Offshore use)

- Excellent corrosion resistance
- Good recoatability properties
- Excellent adhesion properties
- Good cure rate over a wide temperature range
- Excellent application properties

Typical Uses

Direct-to-metal primer for Amercoat heavy duty epoxy non-skid coatings:

- Amercoat 138L and 138G
- Amercoat 136L and 136G
- Amercoat 237M

Qualifications

U. S. Naval Ships' Technical Manual, Chapter 631

Military Sealift Command Instructions 4750.2

Approval - MIL-PRF-24667A

Surface Preparation

Coating performance is, in general, proportional to the degree of surface preparation.

All surfaces must be free of oil, grease and moisture before blasting to near white metal, equivalent to Steel Structures Painting Council SP10 or Swedish Standard Sa 2½. The steel profile after blasting should be 2-4 mils in depth and be of a jagged nature as opposed to a peen pattern. Surfaces must be free of grit dust, scattered shot or grit, and all other contaminants.

Primer should be applied to cleaned surfaces as soon as possible to prevent rerusting or contamination.

Welds should be continuous with no overlapping steel surfaces or rough edges. Remove all weld spatter.

Steel – Clean to SSPC SP-10. Blast to achieve a surface profile of 2-4 mils (50-100 microns) as indicated by a Keane-Tator Surface Profile Comparator, Testex Tape or similar. Increase coating thickness if profile greater than 4 mils.

Repair – Prepare damaged areas to original surface preparation specifications, feathering edges of intact coating. Thoroughly remove dust or abrasive residue before touch up.

Physical Data

Finish	Semi-gloss	
Colors	Dark gray, buff	
Components	2	
Curing mechanism	Solvent release and chemical reaction between components	
Volume solids (ASTM D2697, modified)	67% ± 3%	
Dry film thickness per coat	2-6mils (50-150 microns)	
Coats	1	
Coverage 1 mil (25 microns)	ft ² /gal 1075	m ² /L 26.5
VOC (EPA 24) mixed	lb/gal 2.2	g/L 264
Temperature limit continuous (dry)	°F 200	°C 93
Flash point (SETA)	°F 100	°C 37
Amercoat 137 resin	103	39
Amercoat 137 cure	80	27
T-10	2	-17
Amercoat 12		

Application Data

Applied over	Prepared steel	
Surface preparation steel	SSPC-SP10	
Method	Spray, brush or roller	
Mixing ratio (by volume)	4 parts resin to 1 part cure	
Pot life (hours)	77°F /25°C 4	
Environmental conditions		
Temperature	°F	°C
air and surface	40 to 120	5 to 50
material (minimum)	40	4
Surface temperatures must be at least 5°F (3°C) above dew point to prevent condensation.		
Thinner	T-10	
Equipment cleaner	Thinner or Amercoat 12	

Shipping Data

Packaging units		5 gal monopack
cure		1 gal in 1-gal can
resin		4 gal in 6-gal can
Shipping weight (approx)	lb	kg
5-gal can		
cure	8.7	3.9
resin	51.6	23.4
Shelf life when stored indoors at 40 to 100°F (4 to 38°C)		
cure and resin	1 year from shipment date	

Numerical values are subject to normal manufacturing tolerances, colors and testing variances. Allow for application losses and surface irregularities.

This product is photochemically reactive as defined by the South Coast Air Quality Management District's Rule 102 or equivalent regulations.

Adhere to all application instructions, precautions, conditions and limitations during storage, handling, application and drying periods to obtain the maximum performance. For conditions outside the requirements or limitations described, contact your PPG representative.

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 with 30 to 1 pump ratio or greater, with a 0.019- to 0.025-inch (0.48 mm to 0.63 mm) fluid tip.

Conventional spray – Industrial equipment, such as DeVilbiss MBC or JGA or Binks 18 or 62 spray gun. A moisture and oil trap in the main air supply line, a pressure material pot with mechanical agitator and separate regulators for air and fluid pressure are recommended.

Application Procedure

Amercoat 137 primer can be applied by both conventional air spray and airless spray equipment.

For air spray application, a fluid tip of .070" to .086" (DeVilbiss E and D tips) and an air cap with good break-up such as DeVilbiss 704 or 765 will give good results. The fluid pressure should be kept low, about 15 PSI, with just enough air pressure to get good break-up of the coating. Excessive air pressure can cause overspray problems.

Where airless equipment is used, a 30 to 1 pump and .021" to .023" tip size will provide a good spray pattern. Ideally, fluid hoses should not be less than 3/8" ID and not longer than 50 feet, not including short 1/4" ID whips. Larger diameter hoses should be used for long fluid lines. Long fluid lines with narrow hoses will greatly reduce fluid pressure at the gun, causing poor spray patterns.

For touch-up work, Amercoat 137 primer can be applied by brush or roller. Care should be taken that proper and uniform film thicknesses are obtained.

Mixing and Thinning

Amercoat 137 primer is a two component product supplied in 5 gallon monopack kits which contain the proper ratio of resin and cure. The entire contents of each container must be mixed together.

Power mix the resin portion first to obtain a smooth, homogeneous condition. After mixing the resin portion, add the cure slowly with continued agitation. After the cure add is complete, continue to mix slowly for 15 minutes.

Thinning is not normally required or desired; however, at lower temperatures, up to 10% T-10 thinner can be added depending on local VOC and air quality regulations. Any solvent addition should be made after the two components are thoroughly mixed.

The pot life of the mixed material is 4 hours at 77°F (25°C). Higher temperatures will reduce working life of the coatings; lower temperatures will increase it.

Safety Precautions

Read each component's material safety data sheet before use. Mixed material has hazards of each component. Safety precautions must be strictly followed during storage, handling and use.

CAUTION – Improper use and handling of this product can be hazardous to health and cause fire or explosion.

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 mists and vapor 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 interiors 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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