AMERCOAT®

Protective Coatings

Amercoat 325

Polyamide-cured Coaltar Epoxy

Product Data/ Application Instructions

- **400 microns of protection in only one coat, thereby eliminating intercoat adhesion problems of two-coat coaltar epoxies.**
- **One coat application significantly reduces labour cost.**
- **Superior application by airless and conventional spray.**
- **For immersion, tanklining and non-immersion service.**
- **Broad chemical resistance.**

Typical Uses
IMMERSION - Intermittent or continuous immersion on marine structures, hulls and ship bottoms. Resists impressed current cathodic protection levels up to 850 millivolts (with respect to $Cu/CuSO_4$ reference electrode) when used with Amercoat primer. Lining for tank interiors in contact with fresh water or seawater, alkalies, salt solutions and sour crude. NON-IMMERSION - Areas exposed to chemical fumes, splash or spillage. Piers, pipelines and structural steel in oil refineries, power plants and chemical plants.

Recommended Systems
(For immersion and non-immersion systems.) Normally, Amercoat 325 requires no primer, but in the event a holding primer is called for, Amercoat 71 Primer may be used. With Dimetcote Primer, Amercoat 71 is recommended as a tiecoat between Amercoat 325 and Dimetcote.

Physical data

Finish	Flat
Colour	Black, Dark Brown
Substrate	Steel or concrete
Components	2
Curing Mechanism ..	By solvent release and chemical reaction between components
Volume solids	76% (ASTM-D-2697)*
Dry Film Thickness.	400 microns/per coat
Number of coats ...	1
Calculated coverage	1.9 m^2/L

Allow for application losses, surface irregularities, etc.

Application methods…..	Airless or conventional spray
Pot life at 20°C...	4 hours
Curing times:	
to full service.	10 days

Pot life is dependent on temperature and quantities mixed.

Drying times at 20°C at 400 microns dft :	
to handle	16 hours
Induction time at 20°C	
to full cure……..	10 days
Mixing ratio (by volume):	
Component A	4 parts
Component B	1 part
Spec.grav.mixed product	1.26 kg/L
Thinner	Amercoat 65
Cleaner	Amercoat 65
Flash points (Closed Cup):	
Component A	27°C
Component B	27°C
Thinner	24°C
Cleaner	24°C

Packaging :	
Component A	20 L in 25 L can
Component B	5 L in 5 L can
Shipping weight :	
Component A	Approx. 28.0 kg
Component B	Approx. 6.3 kg

Shelf life :
Component A + B..... 1 year from shipment date when in unopened, original containers at 5 to 40°C.

* Volume solids is measured in accordance with ASTM-D-2697. Slight variations may occur due to colour and testing variances.

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Chemical Resistance Suitability of Amercoat 325

Environment	Immersion	Splash and spillage	Fumes and weathering (1)
Acidic	No	Yes	Yes
Alkaline	Yes	Yes	Yes
Crude oil	Yes	Yes	Yes
Refined petroleum products	Limited (2)	Yes	Yes
Solvents		Yes	Yes
Salt solutions			
Acidic	Limited	Yes	Yes
Neutral	Yes	Yes	Yes
Alkaline	Yes	Yes	Yes
Water	Yes	Yes	Yes

The above chart is only a guide to show typical resistance and limitations of Amercoat 325. Your PPG representative will help you evaluate your particular corrosion protection needs and make the correct recommendations for your specific requirements.
(1) Due to the nature of the epoxy resin, chalk will form on prolonged exposure to sunlight but does not affect protective properties.
(2) May discolour refined products.

Application Data Summary
For complete information on procedures, equipment and safety precautions, see application instructions. Like all high-performance coatings Amercoat 325 must be applied as recommended to obtain the maximum protection for which this coating is formulated.
SURFACE PREPARATION - Steel abrasive blast. Concrete abrasive blast or acid etch.
EQUIPMENT - Standard industrial spray equipment, airless or conventional.
APPLICATION - Obtain 400 microns dry in one coat. Apply in even, parallel passes with 50% overlap, immediately followed by additional cross-spray passes to obtain proper thickness.
Exposure to most atmospheric conditions as soon as sufficiently hard to withstand the handling required.

Immersion in water where abrasion is not critical, such as ships' ballast tanks or bilges, in 72 hours at 20°C.
Full cure, where maximum chemical or abrasion resistance is required, takes 10 days at 20°C.

Surface Preparation
STEEL - Welds should be continuous with no skipwelds on overlapping steel surfaces.
NON-IMMERSION - Blast in accordance with Swedish Standard SA 2.5 SIS 05 5900 - 1967 or Steel Structures Painting Council SP 10.
IMMERSION - Blast all steel in accordance with Swedish Standard SA 3 SIS 05 5900-1967 Steel Structures Painting Council SP 5. Blast to achieve a 50 to 100 microns profile as determined with a Keane Tator Surface Profile Comparator or similar instrument. Remove abrasive residues and dust from surface.
CONCRETE - Light abrasive blasting is best to remove all previous coatings, chalk and surface glaze or laitance. After blasting, small holes or voids in cast concrete wall or overhead surfaces should be filled with a Filler compound before applying Amercoat 325.
AMERCOAT 71 - Surfaces must be dry and free of all contamination. Refer to application instructions for Amercoat 71 for drying and curing times limitations.
IMPORTANT - Apply Amercoat 325 as soon as possible after surface preparation to prevent recontamination. Do not leave blasted steel uncoated overnight. In case of contamination, remove contaminants. Spot blast steel if needed.

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 28:1 or higher pump ratio and a fluid tip with a 0.45 to 0.67 mm orifice.
CONVENTIONAL - Industrial equipment such as DeVilbiss MBC or JGA or Binks No. 18 or 62 spray gun. 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. Mixer must be powered by an air motor or an explosion proof electric motor.

Environmental Conditions
(During application)
Air temperature: 5 to 50°C
Surface temperature: 5 to 60°C
Material temperature: 10 to 38°C
To prevent moisture condensation during application, surface temperature must be at least 3°C above dew point. Minimum temperature for satisfactory cure is 10°C.

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Drying and Curing times
The curing process requires evaporation of solvents and chemical reaction between components and is dependent upon time, temperature and proper ventilation.

For most exterior atmospheric exposures, the coating may be placed in service as soon as it has dried sufficiently to withstand handling.

For immersion in water, where early abrasion resistance is not required such as ships, ballast tanks or bilges, the required curing time is 72 hours at 20°C.

Where the maximum chemical or abrasion resistance is required or for critical applications such as circulating waterlines, the coating must be fully cured according the following schedule:

Surface Temperature :	10°C	20°C	35°C
Fully cured	28 days	10 days	4 days

The indicated drying and curing times are for a dry film thickness of 400 microns. If the thickness is greater allow additional curing time. In all cases higher temperatures will shorten and lower temperatures will lengthen the curing times.

Repair
For repaired of damaged, imperfect or thin areas, additional Amercoat 325 should be applied within the following maximum drying times to assure proper adhesion:

Surface Temperature	10°C	20°C	30°C
Maximum drying time:	72 hours	24 hours	16 hours

NOTE: Do not allow more than six hours of total sunlight exposure before applying repair coat and protect against rain, moisture or condensation, otherwise intercoat adhesion may be impaired. If the maximum drying time has been exceeded, the surface must be roughened by brush blasting before applying repair coat.

Application Procedure
Amercoat 325 is packaged in the proper mixing proportions of component A and B solution.
Component A: 20 L in 25 L can
Component B: 5 L in 5 L can

1. Flush all equipment with recommended Thinner before use.

2. Stir each component thoroughly then combine and mix until uniform. Do not mix more material than can be used with 2 hours at 21°C (70°F) and 1 hour at 30°C (86°F). potlife is shortened by higher temperatures.

3. For conventional spray. Thin only as needed for workability with no more than approximately 10 vol % of recommended Thinner.
Thinning is normally not needed for airless spray.

4. When applying by conventional spray, use adequate air pressure and volume to ensure proper atomization.

5. Stir during application to maintain uniformity of material. Apply a wet coat in even parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.

6. Double coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc..

7. Application at 526 microns wet film thickness will normally provide 400 microns dry film.

8. Check thickness of dry coating with a non- destructive dry film thickness gauge. Such as Microtest or Elcometer, if dry film thickness is less than 300 microns, apply additional material. Total dry film thickness must not exceed 450 microns.

9. When pinhole testing is required, check continuity of dry but uncured coating with a non-destructive holiday detector.

10. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair large areas by spray.

11. In confined areas ventilate with dry and 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.

13. Clean all equipment with recommended Thinner immediately after use or at least at the end of each working day or shift. When left in spray equipment. Amercoat 346 will cure and cause clogging

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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.