



Amercoat 346

Modified Phenolic Epoxy

Product Data/ Application instructions

- **High solids modified phenolic epoxy**
- **Versatile tanklining for interior of ships tanks, barges, tank cars and storage tanks**
- **A tough and durable abrasion resistant tanklining with excellent chemical resistance**

Typical Uses

Amercoat 346 can be used as a tank lining for ships tanks, road tankers, railroad cars and storage tanks in chemical and petrochemical industry.

Amercoat 346 tank lining is resistant to solvents, caustic, crude and fuel oils, animal and vegetable oils and fats, neutral, alkaline and non oxidizing salt solutions in water.

For a comprehensive listing of Amercoat 346 chemical resistance, see the latest Amercoat 346 product resistance list.

For specific exposures and recommendations; please contact your Ameron representative.

Application Data Summary

The Amercoat 346 tank lining system consists of three coats of Amercoat 346 applied at 100 µm dry film thickness each, in the subsequent colors light gray, dark gray and light gray. It is essential that substrate and air temperature are above 15°C during application, drying and curing.

For complete information on drying times, procedures, environmental conditions, equipment and safety precautions, refer to Amercoat 346 Application Instructions. Like all high-performance coatings, Amercoat 346 must be applied as recommended to obtain the maximum protection for which the coating is formulated.

Surface preparation

Dry abrasive blast to "near white metal" according to ISO 8501-1 Sa2½ or Steel Structure Painting Council SSPC-SP-10, and with a minimum average profile of 40 microns.

Equipment

Standard industrial spray equipment, either airless or conventional.

Safety

Improper use and handling of Amercoat 346 can be hazardous to health and may cause fire or explosion. Safety precautions included with the Application instructions should be strictly followed during all storage, handling, use and drying periods.

Physical Data

Finish	semi gloss
Colors	dark gray (SC 722) light gray (SC 712)
Surface	minimum Sa 2½ abrasive blasted steel
Components	2
Curing mechanism	solvent release and chemical reaction between components
Volume solids	75% (ASTM D2697, modified) *
Dry film thickness	100 µm per coat
Number of coats	3 (SC 712 / SC 722 / SC 712)

Calculated coverage
(at 100 µm)7.5 m²/l
Allow for application losses, surface irregularities, etc.

Application	airless or conventional spray
Potlife (at 20°C)	2 hours
(at 30°C).....	1 hour
Drying time to recoat.....	16 hours at 20°C
Curing time for immersion service	12 days at 20°C

For added chemical resistance the Amercoat 346 system may be cured at elevated temperatures. This can be achieved by carrying an approved hot cargo.

Potlife, drying and curing times are dependent on temperature and quantities mixed.

Mixing ratio (by volume)	
resin	4 parts
cure	1 part
Thinner	Thinner 91-83
Cleaner	Thinner 90-58
Flash points (Closed Cup)	
resin	22°C
cure	27°C
Thinner 91-83	26°C
Thinner 90-58	21°C
Packaging	
resin	16 l in a 20 l can
cure	4 l in a 5 l can
Shipping weight	
resin	approx. 30 kg
cure	approx. 4.5 kg
Shelf life	1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C.

* Volume solids is measured in accordance with ASTM D2697 modified. Slight variations ± 3% may occur due to colour and testing variances.

Amercoat 346

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conditions of service, we expressly disclaim any responsibility for the results obtained from the use of this product or for any consequential or incidental effects of any kind.

Amercoat 346 is a high-solids modified phenolic epoxy tank lining. Refer to Amercoat 346 product data for properties. Uses to obtain the maximum performance to all application instructions, precautions, conditions and limitations is necessary.

Surface Preparation

STEEL-Round off all rough welds and sharp edges. Remove weld spatter. Blast in accordance with SA 2½ ISO 8501-1 or Steel structures Painting Council SSPC-SP-10.

NOTE: Blast to achieve a minimum average profile of 40 microns as determined with a keane Tator Surface profile Comparator or similar instrument. Remove abrasive residues and dust from surface.

IMPORTANT – Apply first coat of Amercoat 346 as soon as possible to prevent rusting. Keep moisture, oil, grease or other organic matter from surface before coating. Spot-reblast to remove any contamination solvent wiping is not enough.

REPAIR-Spot blast to bare metal feathering edges of sound coatings. Remove dust, dirt. Etc.. before recoating.

Environmental Conditions

During application, drying and currying Air temperature: 15-50°C (59- 120°F) Surface temperature: 15-55°C (59- 130°F)

The surface temperature must be at least 3°C(5°F) above the dew point to prevent moisture condensation.

Application Equipment

The following equipment is listed as a guide and suitable equipment from other manufactures may be used. Adjustments of pressures and change of tip size may be needed to achieve the proper spray characteristics.

AIRLESS SPRAY – Standard airless spray equipment, such as Graco King with a 0.43-0.58mm (0.017-0.023 inch) irufuce.

CONVENTIONAL SPRAY-Industrial equipment, such as Devilbiss MBC spray Gun with No: 704 Air Cap, "E" Fluid Tip and Needle and a pressure material pot with ecumenical agitators. A moisture and oil trap in the main air supply line and separate regulators

for air and fluid pressure are required. MIXER- Use power mixer, mixer must be powered by an air motor or an explosion proof electric motor.

Amercoat 346

Application Procedure

Amercoat 346 is packaged in the proper mixing proportions of resin solution and curing solution. 25ltr unit Resin solution – 20 ltr in 25 ltr can Cure solution – 5 ltr in 10 ltr can The Amercoat 346 tank lining system consist of three coats of Amercoat 346 applied at 100 microns dry film thickness each, in the subsequent colours, light gray, dark and light gray (SC712, SC722)

1. Flush all equipment with Thinner 90-58 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 Thinner 91-83. 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 137 microns wet film thickness will normally provide 100 microns dry film.
8. Allow Amercoat 346 to dry at least 16 hours at 21°C(70°F) between each coat.
9. 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.
10. When pinhole testing is required, check continuity of dry but uncured coating with a non-destructive holiday detector.
11. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair large areas by spray.
12. 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 Thinner 90-58 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.

Repair

STEEL-Spot blast to bare metal feathering edges of sound coatings. Remove dust,dirt etc., before recoating with original system

Amercoat 346

Caution

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 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, exposure 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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