

Protective Coatings

Amercoat 352

100% Solids Epoxy Tank Coating

Product Data/ Application Instructions

- High build, 100% solids epoxy
- Immersion resistant to water and fuels
- Excellent barrier properties
- · Standard airless application
- Easily cleaned, abrasion resistant
- Can be applied up to 3 mm thick on horizontal surfaces

Typical Uses

Amercoat 352 is a solvent free high performance coating that can be applied with standard airless equipment. Amercoat 352 can be used in both marine and industrial environments such as ships tanks, ballast tanks, tank cars and railroad tanks. Amercoat 352 is an excellent barrier coat, providing long-term resistance to corrosion even under aggressive conditions. It is suitable for immersion in both salt and fresh waters, diesel oil and gasolines (not suitable for unleaded gasolines containing methanol or ethanol). Amercoat 352 is used as a repair coating for tank bottoms and as repair material for pitted steel.

Physical Data

Finish	high gloss			
Colour	oxide red, aluminium gray			
Components	2			
Mixing ratio (by volume) resin cure	3 parts 1 part			
Curing mechanism	chemical reaction between components			
Dry film thickness	300 µm per coat			
Number of coats	1 + 2 stripe coats			
Volume solids	100%			
VOC	0			
Calculated coverage	$3.3~\text{m}^2/\text{I}$ at $300~\mu\text{m}$			
Allow for application losses, surface irregularities, etc.				
Specific gravity	1.74 kg/l (mixed product)			
Flash points (Closed Cup) resin cure Thinner 91-82	°C °F 93 199 101 214 25 77			

Amercoat 352

Chemical Resistance

Environment suitability of Amercoat 352.

	Splash and	Fumes and
	spillage	weathering
Acidic	Fair	Good
Alkaline	Excellent	Excellent
Solvents	Excellent	Excellent
Salt solutions		
Acidic	Good	Very Good
Neutral	Excellent	Excellent
Alkaline	Excellent	Excellent
Water	Excellent	Excellent

This chart is only a guide to show typical resistance of Amercoat 352. Contact your PPG representative for your specific requirements.

Surface Preparation

STEEL - Dry abrasive blast to Sa 2% (ISO 8501-1) or Steel Structures Painting Council SP-10. Surface must be free of moisture, grease and other contaminants. Apply Amercoat 352 as soon as possible to keep steel from rusting. Obtain a minimum anchor profile of 50 μm .

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 suitable material such as Nu-Klad 114 epoxy filler compound before applying Amercoat 352. IMPORTANT - Apply Amercoat 352 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 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 - Amercoat 352 is a solvent-free epoxy coating which is applied by a single (pump ratio 45:1 or higher) or plural component airless equipment, using a 0.63 mm (0.025 inch) reverse tip or larger. Pump should be equipped with 3/8" internal diameter high pressure spray hose to improve spray characteristics, the use of an in-line heater is recommended. MIXER - Use power mixer powered by an air motor or an explosion proof electric motor.

Application Data Summary

Like all high performance coatings, Amercoat 352 must be applied as recommended to obtain the maximum performance. If conditions exist that are not within the requirements or limitations described, consult your PPG representative

Application Data

Substrate	abrasive blasted steel	
Application methods	airless spray	
Environmental Conditions (during application, drying and curing) Air temperature		

Optimum material temperatures are between 20 and 25°C (68 and 77°F). At lower temperatures spray properties are affected, at higher temperatures the working time decreases. If material has been stored below 20°C/68°F, warm to minimum 20°C/68°F before mixing.

To prevent moisture condensation during application, surface temperature must be at least 3°C/5°F above dew point. Never apply coatings under adverse environmental conditions. Ensure good ventilation when applied in confined areas.

Drying Times, °C/°F	15/59	20/68	30/86
dry to recoat			
minimum (hours)	20	14	9
maximum (days)	5	3	3
dry through (hours)	48	24	16
dry to load (days)	12	7	4

NOTE: drying times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions. Times are proportionally shorter at higher temperatures and longer at lower temperatures. Prior to recoating ensure the surface is clean. Maximum recoating time depends on coating system to be used. Consult your PPG representative for specific recommendations.

Potlife (at 20°C/68°F) 1 hour

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

 Induction time
 not applicable

 Thinner
 not recommended

 Cleaner
 T-10 Thinner

Amercoat 352

Repair

DAMAGED AREAS ABRADED TO BARE STEEL - remove all rust, loose paint, grease or other contaminants preferably by spot abrasive blasting. Where abrasive blasting is not possible, disc sand using No. 16 open coat paper. Feather edges of surrounding intact coating. TOO THIN AREAS - Remove contaminants and if required roughen surface and apply Amercoat 352 as soon as possible after surface is cleaned to prevent contaminants on the surface.

Application Procedure

Americoat 352 is packaged in two components in the proper proportions:

Resin 15 I in 20 I can
Cure 5 I in 5 I can

- 1. Flush equipment with recommended cleaner.
- Stir both resin and cure to an even consistency with a power mixer. Add cure to resin and continue mixing until a uniform consistency is achieved.
- Apply in a wet coat in even parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.
- 4. Higher temperatures shorten the pot life. Lower temperatures affect sprayability.
- Ventilation with clean air is required during application. Before recoating and curing to dry film, no condensation is allowed.
- Check film thickness using a wet film thickness gauge. If less than 275 μm, apply additional material.
- 7. Do not thin for any reason!
- 8. For immersion service, check for bare areas, pinholes and holidays with a non-destructive wet sponge holiday detector of less than 100 volts, such as Tinker and Rasor Model M1. Apply additional Amercoat 352 to areas requiring touch-up.
- Potlife is 1 hour at 20°C/68°F. Due to pot life limitations, cleaning of equipment must start as soon as possible after application is completed. Never mix more material than can be sprayed in 1 hour.

Note that in hot climates for single component airless the material temperature should be 20 to 25°C (68 to 77°F) prior to mixing otherwise potlife becomes very short. Residues of mixed material can develop very high temperatures and must be discarded to avoid excessive heat build up in the can (e.g. by pouring out in thin layers).

Shipping Data

Packaging resincure	
Shipping weight resincure	

Shelf life 1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C (41 to 104°F)

Amercoat 352

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:

- circulate adequate fresh air continuously during application and drying;
- 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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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.

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