



**AMERON**  
INTERNATIONAL

Performance Coatings & Finishes

# Amercoat® 240



*Universal epoxy coating*

## Product Data/ Application Instructions

- Formulated for direct-to-metal application with excellent substrate wetting while retaining excellent edge coverage
- Exceptional corrosion protection in salt and fresh water immersion and corrosive chemical environments
- Surface tolerant, lowers the cost of surface preparation
- Excellent adhesion to tight rust
- Compatible with water jetted or hand power tool cleaned surfaces.
- Low temperature cure down to 0°F (-18°C) without additives or alternate curing agents
- Fast dry-to-recoat
- High-build (up to 12 mils) in one coat

Very low solvent content meets VOC requirements, reduces the chances for film pinholing and solvent entrapment at the substrate-coating interface, often a major cause of coating failure with conventional epoxies and lower solids systems.

### Typical Uses

#### Tank Linings and Pipe Coatings

- Ballast and fuel tanks
- Bilges, wet voids and other damp areas

#### Ships, Offshore and Marine Structures

- Exterior hull above and below waterline
- Decks and superstructures, piping, and equipment
- Interior surfaces

#### Fabrication and New Construction

- Speeds up production, even at low temperatures
- A single coat multi-purpose, surface-tolerant coating

### Typical Systems

1 <sup>st</sup> coat	2 <sup>nd</sup> Coat	3 <sup>rd</sup> coat
Amercoat 240	None	None
Amercoat 240	Amercoat® 229 Series, 450 Series, Amershield, PSX® 700	None
Amercoat 240	Amercoat 240	None
Amercoat 240	Amercoat 240	ABC #3, ABC #4
Dimetcote® 9 Series or Dimetcote 302H	Amercoat 240	None
Dimetcote 9 Series or Dimetcote 302H	Amercoat 240	450 Series, 229 Series, Amershield, PSX 700

**Tank Coating System**—Two coats of Amercoat 240 at 5 to 8 mils (150 to 200 microns) per coat, plus two stripe coats over sharp edges, cutouts and welds. Use contrasting colors for each coat and stripe coat.

### Physical Data

Finish	Semigloss	
Color	Buff, Haze gray, Pastel green, Oxide red	
Components	2	
Curing mechanism	Solvent release and chemical reaction between components	
Volume solids (ISO 3233 modified)	87% ± 3%	
Dry film thickness (per coat)	4-12 mils (100-300 microns)	
Coats	1 or 2	
Theoretical coverage	ft <sup>2</sup> /gal	m <sup>2</sup> /L
1 mil (25 microns)	1395	33.5
6 mils (150 microns)	233	5.6
VOC (EPA 24) mixed	lb/gal	g/L
	1.2	145
Temperature resistance	dry	
	°F	°C
continuous	250	121
Flash point (SETA)	°F	°C
Amercoat 240 resin	122	50
Amercoat 240 cure	138	59
Amercoat 65	81	27
Amercoat 12	2	-17

## Surface Preparation

Coating performance is, in general, proportional to the degree of surface preparation. Abrasive blasting is usually the most effective and economical method. When this is impossible or impractical, Amercoat 240 can be applied over mechanically cleaned surfaces. All surfaces must be clean, dry and free of all contaminants, including salt deposits.

**Steel**—Remove all loose rust, dirt, grease or other contaminants by one of the following depending on the degree of cleanliness required: SSPC-SP2, 3, 6, or 7. These minimum surface preparation standards apply to steel that has been previously abrasive blasted. The choice of surface preparation will depend on the system selected and end-use service conditions.

For more severe service and immersion, clean to SSPC-SP10. Blast to achieve an anchor profile of 2-3 mils (50-75 microns) as indicted by a Keane-Tator Surface profile Comparator or Testex Tape. Previously blasted steel may be ultra-high pressure water jetted to NACE No. 5/SSPC-SP 12 WJ-2L/SC-1. The wet surface can be dried by blowing with dry compressed air giving special attention to horizontal surfaces and recesses.

**Aluminum**—Remove oil, grease or soap film with neutral detergent or emulsion cleaner; treat with Alodine® 1200, Alumiprep® or equivalent, or blast lightly with fine abrasive.

**Galvanizing**—Remove oil or soap film with detergent or emulsion cleaner; then use zinc treatment such as Galvaprep® or equivalent, or blast lightly with fine abrasive.

**Concrete**—Light abrasive blast per ASTM D4259 to remove all chalk, and surface glaze or laitance. If blasting is not possible, acid etch uncoated concrete per ASTM D4260 to obtain a glaze-free surface with a slightly granular texture. Rinse with clean water and allow to dry thoroughly. After blasting or acid etching, fill all small holes or voids with material such as Nu-Klad® 114A filler compound.

**Aged coatings**—All surfaces must be clean, dry, tightly bonded and free of all loose paint, corrosion products or chalky residue. Abrade surface, then clean with Prep 88. Amercoat 240 is compatible over most types of properly applied and tightly adhering coatings, however, a test patch is recommended to confirm compatibility.

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

## Application Data

Applied over	Steel, concrete, aluminum, galvanizing				
Surface preparation	SSPC-SP2, 3, 6, 7, 10, or 12				
Steel	ASTM D4259 or 4260				
Concrete	Alodine®, Alumiprep® or light abrasive blast				
Aluminum	Galvaprep® or light abrasive blast				
Galvanizing					
Method	Airless or conventional spray. Brush or roller (may require additional coats).				
Mixing ratio (by volume)	4 part resin to 1 part cure				
Induction time (minutes)	70°F/21°C 15				
Environmental conditions	air and surface temperature 20° to 122°F (-7° to 50°C)				
Surface temperatures must be at least 5°F (3°C) above dew point to prevent condensation. At freezing temperatures, surface must be free of ice.					
Thinner	Amercoat 65				
Equipment cleaner	Thinner or Amercoat 12				
Pot life	70°F 3 hours				
Drying time @ 6 mils DFT (hours)	°F/°C				
	90/32	70/21	50/10	32/0	
dry to touch	3	5	10	24	
dry hard	6	8	13	30	
Cure to Immersion	°F/°C				
	120/49	90/32	70/21	50/10	32/0 20/-7
(days)	2	5	7	10	42 90
Recoat/Topcoat time (@ 5 mils DFT)	°F/°C				
minimum (hours)	90/32	70/21	50/10	32/0	20/-7
Amercoat 240	2	5	8	14	28
Amercoat 229T, 450H/HS, PSX 700, 1001	3	6	10	16	40
	°F/°C				
maximum (days)*	90/32	70/21	50/10	32/0	20/-7
Amercoat 240,	90	90	90	90	90
Amercoat 229T, 450H/HS, PSX 700, 1001					

\*Surface must be clean and dry. When recoating or topcoating Amercoat 240 after extended periods, a detergent wash with Prep 88, or equivalent, is recommended to remove contaminants that may have been deposited on the surface. If the maximum recoat/topcoat time has been exceeded, roughen the surface.

## 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 pump ratio of 45:1 or larger, with a 0.021- to 0.025-inch fluid tip,  $\frac{3}{8}$ " ID hose with 50 ft. maximum length. Long hose runs or location of work at heights 20-30 feet higher than the pump location may require higher pump ratios.

**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, and separate regulators for air and fluid pressure are recommended.

**Power mixer**—Jiffy Mixer powered by an air or explosion-proof electric motor.

**Brush or roller**—Additional coats may be required to attain proper thickness.

To obtain the maximum performance, adhere to all application instructions, precautions, conditions and limitations. For conditions outside the requirements or limitations described, contact your Ameron representative.

## Application Procedure

1. Flush all equipment with thinner or Amercoat® 12 before use.
2. Stir resin using an explosion-proof power mixer to disperse pigments.
3. Add cure to resin. Mix thoroughly until uniformly blended to a workable consistency.

Induction time (minutes)	70°F/21°C
	15
4. Do not mix more material than can be used within the expected pot life, 3 hours at 70°F. Higher material temperatures will shorten the pot life considerably.
5. For optimum application, material should be between 50° to 90°F (10° to 32°C).
6. Use only Amercoat 65 thinner at 1 pint/gal, max.

Below 50°F additional thinning may be needed and multiple coats required to achieve specified thickness.
7. To minimize orange peel appearance, adjust conventional spray equipment to obtain adequate atomization at lowest air pressure.
8. Apply a wet coat in even, parallel passes with 50 percent overlap to avoid holidays, bare areas and pinholes. If required, cross spray at right angles.
9. When applying directly over inorganic zincs or zinc-rich primers, a mist coat/full coat technique may be required to minimize bubbling. This will depend on the age of the Dimetcote®, surface roughness and conditions during curing.
10. Ventilate confined areas with clean air during application, between coats, and while curing the final coat. Prevent moisture condensation on the surface between coats.
11. Repair damaged areas by brush or spray.
12. Clean equipment with thinner or Amercoat 12 immediately after use.

**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.

## Shipping Data

Packaging unit	1 gal	
Shipping weight (approx)	lbs	
1-gal unit		
240 resin	11.8	5.4
240 cure	2.0	0.9
5-gal unit		
240 resin	59.0	26.8
240 cure	9.1	4.1

Shelf life when stored indoors at 40° to 100°F (4° to 38°C)  
resin and cure 1 year from shipment date.

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

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

## Safety Precautions

Read each component's material safety data sheet before use. Mixed material has hazards of both components. 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 solvent 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. Ameron makes no recommendation about the types of safety measures that may need to be adopted because these depend on application and space, of which Ameron is unaware and over which it has no control.**

**If you do not fully understand the warnings and instructions or if you cannot strictly comply with them, do not use the product.**

***This product is for industrial use only.  
Not for residential use in California.***

## Warranty

Ameron warrants its products to be free from defects in material and workmanship. Ameron's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Ameron's option, to either replacement of products not conforming to this Warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to Ameron 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 Ameron of such nonconformance as required herein shall bar Buyer from recovery under this Warranty.

**Ameron makes no other warranties concerning the product. No other warranties, whether express, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall Ameron be liable for consequential or incidental damages.**

Any recommendation or suggestion relating to the use of the products made by Ameron, whether in its technical literature, or in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results.

## Limitation of Liability

Ameron's liability on any claim of any kind, including claims based upon Ameron's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or part thereof which give rise to the claim. **In no event shall Ameron be liable for consequential or incidental damages.**

