

# Amercoat® 90HS

Epoxy-phenolic tank lining

# **Application Instructions**

Refer to Product Data Sheet for properties and uses. Adhere to all instructions, precautions, conditions, and limitations to obtain maximum performance. For conditions outside the requirements or limitations described contact your Ameron representative.

## **Surface Preparation**

Coating performance is, in general, proportional to the degree of surface preparation. All surfaces must be clean, dry and free of all contamination, including salt deposits before applying coating.

Steel—New without pits or depressions — blast SSPC-SP10(Sa  $2^{1}/_{2}$ ). Rusted or pitted — blast SSPC-SP5(Sa 3).

Blast to achieve a 1.5-mil (37.6-micron) minimum profile as determined with a Keane-Tator Surface Profile Comparator, Testex Tape or similar device. Remove abrasive residue or dust from surface.

Apply Amercoat 90HS as soon as possible to prevent rusting. Keep moisture, oil, grease or other organic matter off surface before coating. Spot blast to remove any contamination, solvent wiping is not adequate.

Fill small holes or pits with Nu-Klad $^\circ$  114A after applying the first coat of Amercoat 90HS.

 $\begin{tabular}{ll} \textbf{Concrete} - \textbf{Clean concrete} & \textbf{and masonry surfaces; abrasive} \\ \textbf{blast (ASTM D4259) or acid etch (ASTM D4260).} \\ \end{tabular}$ 

Fill small holes or voids with Nu-Klad $^\circ$  114A or 965 before applying Americant 90HS.

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, grease or soap film with neutral detergent or emulsion cleaner; then use zinc treatment such as, Galvaprep® or equivalent or blast lightly with fine abrasive.

# **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, such as Graco Bulldog Hydra-Spray, or larger, with a 0.017- to 0.023-inch orifice.

**Conventional spray** - Industrial equipment, such as DeVilbiss MBC or JGA spray gun, and a pressure material pot with mechanical agitator. A moisture and oil trap in the main air supply and separate regulators for air and fluid pressure are required.

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

#### **Environmental Conditions**

Temperature	°F	°C
air	50 to 100	10 to 43
surface	50 to 120	10 to 49

Surface temperature must be at least  $5^{\circ}\mathrm{F}$  (3°C) above dew point to prevent condensation.

# **Application Procedure**

- 1. Flush all equipment with thinner or Amercoat 12 cleaner before use.
- 2. Stir resin component thoroughly, then add cure to resin and mix until uniform. Amercoat 90HS is packaged in the proper mixing proportions of resin and cure. Do not mix more material than will be used within pot life time.

		1	
Pot life (hours)			°F/°C
	90/30	70/21	50/10
	2	4	6

 If necessary for workability, use no more than 1 pint of thinner per gallon of Amercoat 90HS for airless or conventional equipment.

Thinner Amercoat 65 or 101

- 4. When applying by conventional spray, use adequate air pressure and volume to ensure proper atomization.
- 5. Apply a wet coat in even parallel passes; overlap 50 percent to avoid holidays, bare areas and pinholes and to achieve a dry film thickness of 4 6 mils (100 150 microns).

Drying time (ASTM D1640)	(hours)	°F	'/°C	
· ·	100/38	90/32	70/21	50/10
touch	1	$1^{1}/_{2}$	3	6
through	6	8	12	24
recoat				
minimum	3	4	8	12
maximum (days)	$31/_{2}$	5	7	12

Roughen surface if maximum recoat time is exceeded.

#### Curing time for immersion service\*

Steel sub	strate	Ambient cure		
Temperature		Heat cure <sup>+</sup>	$12mils/300\mu$	$18\text{mils}/450\mu$
°F	°C	hours	days	days
212	100	1	NA	NA
180	82	2	NA	NA
160	71	4	NA	NA
140	60	8	NA	NA
122	50	24	NA	NA
104	40	96	NA	NA
86	30	NA	4	6
70	21	NA	7	$91/_{2}$
59	15	NA	10	13
50	10	NA	14	19

<sup>\*</sup> After application and during the above curing schedule tanks must be ventilated to prevent solvent entrapment.

- 6. Check dry film thickness using nondestructive dry film thickness gauge such as Mikrotest or Elcometer. If less than the specified thickness, apply additional material. Total dry film thickness must not exceed 14 mils (350 microns) in 2 coats, and must not be less than 8 mils (200 microns).
- When a pinhole-free coating is required, check continuity
  of dry but uncured coating with a nondestructive holiday
  detector such as Tinker-Rasor Model M-l. Apply additional
  coats to areas requiring touch-up.
- After use, clean equipment immediately with thinner or Amercoat 12.

<sup>&</sup>lt;sup>†</sup> For maximum chemical resistance, minimum cure temperature is 104°F (40°C).

#### **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.

 ${\it CAUTION-Improper}\ use\ and\ handling\ of\ this\ product\ can\ be\ hazardous\ to\ health\ and\ cause\ fire\ or\ explosion.$ 

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. Ameron 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 Ameron 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 professional 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 knowhow 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.

