AMERON
INTERNATIONAL
Performance Coatings & Finishes

Amercoat® 78HB

Amine-cured coal-tar epoxy

Application Instructions

Refer to Amercoat 78HB Product Data Sheet for properties and uses. Adhere to all application instructions, precautions, conditions and limitations to obtain the maximum performance. For conditions outside the requirements or limitations described, contact your Ameron representative.

Surface Preparation

Coating performance is proportional to the degree of surface preparation. Prior to coating, all surface must be clean, dry and free of all contaminants, including salt deposits.

Steel – Welds should be continuous with no skip-welds on overlapping steel surfaces.

Nonimmersion – New steel without pits or depression: abrasive blast, SSPC-SP6. Previously painted or pitted steel: abrasive blast, SSPC-SP10.

Immersion – Blast all steel SSPC-SP10, as a minimum. Blast to a 2 - 4 mil (50 - 100 microns) profile as determined with a Keane-Tator Surface Profile Comparator or a similar device. Remove abrasive residue or dust from surface.

Concrete – Light abrasive blast to remove all previous coatings, chalk, and surface glaze or laitance. If blasting is not possible, acid etch uncoated concrete 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.

Dimetcote® – Surface must be clean and dry. Remove any contamination or curing residue. If surface is glazed, sweep blast to roughen. Before topcoating refer to the specific Dimetcote application instructions for drying time and other requirements.

***Note** – For immersion service, Amercoat 370 primer must be used as a tiecoat over Dimetcote before applying Amercoat 78HB.*

Amercoat 370 primer – Surfaces must be dry and free of all contamination. Refer to Amercoat 370 application instructions for drying and curing times.

***Important** – Apply Amercoat 78HB as soon as possible after surface preparation. Do not leave blasted steel uncoated overnight. In case of recontamination, remove contaminants. Spot blast steel if needed.*

Application Equipment

The following is a guide. Suitable equipment from other manufacturers may be used. Changes in pressure and tip size may be needed to achieve the proper spray characteristics.

Airless spray – Standard equipment, with 30:1 pump ratio or larger, with a 0.018- to 0.027-inch (0.46 to 0.69 mm) fluid tip.

Conventional spray – Industrial equipment such as DeVilbiss MBC or JGA or Binks 18 or 62 spray gun. A pressure material pot with a moisture and oil trap in the main air supply line are essential. Separate pressure regulators for air and fluid pressure are recommended.

Power mixer – Jiffy Mixer powered by air or explosion-proof electric motor. Propeller-type mixing head is satisfactory.

Environmental Conditions

Temperature	°F	°C
air	40 to 122	4 to 50
surface	40 to 122	4 to 49
material	50 to 100	10 to 38

Surface temperature must be at least 5°F (3°C) above dew point at all times to prevent condensation.

***Note** – For maximum film build and ease of application, air, surface and material temperature should be 70 to 90°F (21 to 32°C). Higher or lower temperatures may require spray technique modification.*

Application Procedure

Amercoat 78HB is packaged in the proper proportions which must be mixed together before use.

1. Flush equipment with Amercoat 12 cleaner before use.
2. Stir resin (pigmented material) with a power mixer to an even consistency.
3. Add cure (clear solution) to resin and continue stirring for five minutes.

Pot life (hours)	°F/°C		
	90/32	70/21	50/10
	2	4	8

***Note** – Do not mix more material than will be used within pot life. Higher temperatures shorten pot life.*

4. Thinning is normally not required when using airless spray equipment.
5. For conventional spray, thin only as necessary for workability. Use up to one pint Amercoat 65 or 101 thinner per gallon of mixed coating.
6. Apply in even, parallel passes with 50 percent overlap. Immediately follow with cross-spray passes to obtain a continuous film without bare spots, pinholes, or holidays.
7. Double-coat all welds, corners, sharp edges, rivets and bolts, rough spots, etc.
8. A 20.5 mil (520 micron) wet film thickness will normally provide 16 mils (400 microns) of dry film.
9. Check thickness of dry but uncured coating with a nondestructive gauge, such as Mikrotest or Elcometer. If thickness is less than specified, apply additional material as needed. Allowable thickness range is 8 to 20 mils (200 to 500 microns), depending upon service.
10. For a pinhole-free coating, check continuity of dry but uncured coating with a nondestructive holiday detector such as Tinker and Rasor Model AP/W at approximately 2300 volts. Repair by brushing Amercoat 78HB over affected areas.
11. Apply additional material to correct film thickness and repair pinholes or damaged areas. See Recoat and Repair Schedule. The surface must be clean and dry when repair coat is applied.
12. Inside tanks, pipes and other confined areas, ventilate during application and curing to remove solvents.
13. Clean all equipment with Amercoat 12 cleaner immediately after completion of work. Gelled Amercoat 78HB will plug spray equipment.

Curing Time

Amercoat 78HB cures by solvent release and chemical reaction and is dependent upon time, temperature and proper ventilation. For water immersion where early abrasion resistance is not required, such as ships' ballast tanks or bilges, the required curing time is 72 hours at 70°F (21°C).

Recoat and Repair Schedule

When two coats are specified or for repair, apply additional Amercoat 78HB within the specified drying times to ensure proper adhesion. Allow no more than six hours of total sunlight exposure before recoating. Protect against rain, moisture or condensation. Otherwise, intercoat adhesion may be impaired. If the maximum recoat time has been exceeded, roughen surface by brush blasting before coating. Where maximum chemical or abrasion resistance is required, the coating must be fully cured according to the schedule. These times are for a thickness of 16 mils (400 microns). For greater thickness, allow additional time.

Drying and cure times (ASTM D1640)		°F/°C	
	90/32	70/21	50/10
touch (hours)	3½	6½	12½
through (hours)	10	15½	48
recoat (maximum, **hours**)	12	**24**	72
cure before service (days)	4	10	28
water immersion (minimum, days)		3	
chemical resistance (minimum, days)		10	

Safety Precautions

Read each component's material safety data sheet before mixing. Mixed material has hazards of each component. 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 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.

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.**

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