AMERON
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Performance Coatings & Finishes

Amercoat® 3207

Waterborne epoxy preconstruction primer

Product Data/ Application Instructions

- Low odor
- Weldable primer
- Long pot life
- VOC compliant
- Excellent corrosion resistance
- Clean and thin with water
- Fast drying
- Compatible with water-based and solvent-based epoxy coatings

Typical Uses

Amercoat 3207 primer provides excellent corrosion protection for steel as a weldable preconstruction primer.

Surface Preparation

Coating performance is proportional to the degree of surface preparation. Abrasive blasting is usually the most effective and economical method to remove rust and mill scale. Prior to coating, surface must be cleaned, dry, undamaged and free of all contaminants, including salt deposits. Round off all rough welds and sharp edges, remove all weld spatter.

Steel – Shot blast per SSPC-SP10 to achieve a 1-2 mil (35 to 65 microns) profile as indicated by a Keane Tator Surface Profile Comparator, Testex Tape or similar device.

Apply Amercoat 3207 as soon as possible to avoid rusting or other recontamination. Do not leave blasted steel uncoated over night. Spot blast to remove any contamination; solvent wiping is not satisfactory.

Galvanizing –Remove oil or soap film with neutral detergent or emulsion cleaner. Then use zinc treatment such as Galva-prep® or equivalent or blast lightly with fine abrasive.

Aluminum – Remove oil, grease or soap film with neutral detergent or emulsion cleaner; treat with Alodine®, Alumiprep® 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 – Standard equipment such as Graco Bulldog Hydra-Spray 30:1 or larger with a 0.015- to 0.019-inch spray tip.

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

Power mixer – Jiffy Mixer powered by an air or an electric motor.

Physical Data

Finish	Flat	
Color	Oxide red	
Components	2	
Curing mechanism	Solvent release and chemical reaction between components	
Volume solids (ASTM D2697 modified)	39% ± 3%	
Dry film thickness per coat*	1 mil (25 microns)	
Coats	1	
Theoretical coverage	ft^2/gal	m^2/L
1 mil (25 microns)	625	15.3
VOC	1.9 lb/gal	228 g/L
Flash point (SETA)	°F	°C
cure and resin	>200	>93
Amercoat 12	2	-17
Amercoat 928	175	79

Application Data

Applied over	Prepared steel, aluminum, galvanizing		
Surface preparation	Shot blast SSPC-SP10		
Method	Spray airless or conventional		
Mixing ratio (by volume)	1 part cure to 8 parts resin		
Pot life / Induction time		°F/°C	
	90/32	70/21	50/10
pot life (hours)	12	24	48
inductions time (min)	10	20	40

After mixing resin and cure allow for induction time before application.

Environmental conditions		
Temperature	°F	°C
air	50 to 110	10 to 43
surface	50 to 120	10 to 49
Relative Humidity	85% maximum	

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

Drying time (ASTM D1640)		°F/°C	
	90/32	70/21	50/10
touch (minutes)	3	5	20
recoat 1 topcoat			
minimum (hours)	$1^1/_2$	2	48
maximum	None		
Thinner	Fresh water		
Equipment cleaner	Fresh water, Amercoat 12 or 928		

Qualifications

Weldable in accordance with MIL-STD-248 D Paragraph 4.4.1.12

Film thickness should average 1 mil and the maximum film build over the area should be $1^1/_2$ mils to maintain weldability.

Application Procedure

Amercoat 3207 is packaged in the proper proportions which must be mixed together before use.

1. Flush equipment with Amercoat 12, followed by fresh water before use.
2. Stir resin using power mixer to disperse pigments.
3. Add cure and mix thoroughly until uniformly blended. **Induction time before application is required** for proper film build and appearance. Insufficient mixing (low speed or manual mixing) will result in poor emulsification and consequently be detrimental to coating performance.
4. Conventional spray may require thinning for workability, add up to $^1/_2$ pint water per gallon of Amercoat 3207. Do not exceed thinning limit. Film build will be reduced. Airless spray-thinning normally not required.
5. Apply a wet coat in even, parallel passes; overlap each pass 50 percent to avoid bare areas, pinholes and holidays. If required, cross spray at right angles to first pass.
6. Ventilate with clean air during application and drying. Temperatures and relative humidity of ventilating air will affect drying times. Avoid contact with water or condensation on coating surface until dry through; otherwise, surface discoloration may occur.
7. Clean all equipment immediately after use with clean, warm water, followed by Amercoat 12 to remove any partially dried material and moisture.

Safety Precautions

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

CAUTION – Improper use and handling of this product can be hazardous to health.

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 industrial use only. Not for residential use.

Shipping Data

Packaging units	1 gal	5 gal
cure	0.11 gal in $^1/_2$ pt can	0.55 gal in 1-gal can
resin	0.89 gal in 1-gal can	4.45 gal in 5-gal can

Shipping weight (approx)	lb	kg
1-gal unit		
cure	1.1	0.5
resin	10.5	4.8
5-gal unit		
cure	6.0	2.7
resin	51	23.1

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

Protect from freezing.

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

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

Typical Properties

Elongation (ASTM D522)	>35%
Impact resistance (3 mils) (ASTM G14)	17 in lbs
Rapid deformation (3 mils) Reverse (ASTM D2974)	>160 in lbs
Moisture vapor transmission Specific Permeability (24 hrs) (ASTM D1653)	0.77 mm mg/cm^2

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.

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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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