

# Amercoat® 432

*Moisture cured polyurethane penetrating sealer*

## Product Data/ Application Instructions

- Single-component penetrating sealer
- Excellent for penetrating and sealing rusted steel and concrete
- Excellent adhesion to marginally prepared surfaces
- Tolerant of damp, cold, humid, or foggy application conditions
- Cures down to 20°F

### Typical Uses

Amercoat 432 is a single-component, moisture cured polyurethane penetrating sealer specifically formulated to enhance adhesion of subsequent coatings. This product is normally applied over rusty steel or less than well prepared surfaces, as a first coat in a multi-coat moisture cured polyurethane system for the protection and maintenance of:

- Steel structures in the chemical and petrochemical industry, power plants, tank farms, waste treatment plants;
- Bridges and related structures

### Systems Using Amercoat 432

Amercoat 432 is normally applied as a sealer coat in a multi-coat moisture cured polyurethane system. When application over less than well-prepared surfaces is necessary, Amercoat 432 may be applied over tight rust and well adherent aged coatings.

Primer	Intermediate Coat	Finish Coat
Amercoat 432	Amercoat 433	Amercoat 434
Amercoat 432	Amercoat 370	V40 or V41, 450HS PSX 1001

## Physical Data

Finish	Variable, dependent upon substrate	
Color	Red oxide	
Components	1	
Volume solids (calculated)	65% ± 2%	
Dry film thickness per coat	1.5-2.0 mils (38-50 microns)	
Coats	1	
Theoretical coverage	ft <sup>2</sup> /gal	m <sup>2</sup> /L
1 mil (25 microns)	1,042	25.4
VOC	lb/gal	g/L
unthinned	2.8	340
thinned (¼ pt/gal)	3.2	383
Temperature resistance	°F	°C
continuous	325	163
intermittent	375	191
Flash point (SETA)	°F	°C
Amercoat 432	108	42
Amercoat 915	75	24
Amercoat 65	78	25
Amercoat 101	145	63
Amercoat 12	2	-17

## Application Data

Applied over	Prepared steel or concrete
Surface preparation	SSPC-SP2 or better
Method	Airless or conventional spray, brush or roller

Environmental conditions		
Temperature	°F	°C
air	20 to 120	-7 to 50
surface	20 to 120	-7 to 50
Relative humidity	40% minimum	
Drying time ASTM D1640 @ 50% RH(hours)		
	F/°C	

	90/32	70/21	50/10	30/-1	20/-7
touch	1	2	4	8	12
hard	4	6	12	18	24

*Note: At relative humidities below 40%, drying will be retarded*

recoat					
minimum (hours)	4	6	12	18	24
maximum (weeks)	2	2	2	2	2

*Note: If maximum recoat time is exceeded, roughen surface.*

Thinner	Amercoat 65, 101, or 915
Equipment cleaner	Thinner or Amercoat 12

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.

Caution: Amercoat 432 may be applied to damp surfaces at high humidities. Do not apply over wet surfaces or puddles of water. At a relative humidity below 40%, the curing will be retarded.

## Surface Preparation

Coating performance is proportional to the degree of surface preparation. Surface must be cleaned, undamaged and free of all contaminants, including salt deposits. Amercoat 432 can be applied on damp substrates at high humidities. Do not apply over wet surfaces or puddles of water.

**Steel** - Abrasive blasting is usually the most effective and economical method of surface preparation. For circumstances where this is impossible or impractical, Amercoat 432 can be applied to mechanically cleaned surfaces. Power tool clean in accordance with SSPC-SP 3 or hand tool clean in accordance with SSPC-SP 2. Remove all loose rust dirt, moisture, oil and grease or other contaminants from surface prior to the application of the primer.

**Aged coatings** - This material may be applied over most aged alkyd, epoxy, and zinc rich coatings which are in sound condition, tightly adherent, and suitable for overcoating. Before any overall application of a previously painted surface is undertaken, a small area should be coated and then inspected for lifting, wrinkling or softening of the underfilm.

## Application Equipment

The following equipment is listed as a guide and suitable equipment from other manufacturers may be used.

Adjustments of pressures and change of tip size may be needed to obtain the proper spray characteristics.

**Airless spray** - Standard airless spray equipment such as Graco, DeVilbiss, Nordson-Bede, Speeflo, or others having a 30:1 or higher pump ratio and a 0.017-to 0.021-inch orifice.

**Conventional spray** - Industrial spray equipment such as DeVilbiss 510 gun with 704 air cap and a 0.55 to 0.73 fluid tip. Separate air and fluid pressure regulators, and moisture and oil trap in the main air supply line are recommended.

**Brush** - Natural bristle. Maintain a wet edge.

**Roller** - Industrial solvent-type. Level any air bubbles with a bristle brush. Short nap roller (no greater than  $\frac{3}{8}$  in.) will help minimize bubbling.

## Application Procedure

1. Clean all equipment with Amercoat 12 or thinner.
2. If thinning is necessary for workability, thin with up to  $\frac{3}{4}$  pt of Amercoat 65, 101, or 915 per 1 gal of Amercoat 432.
3. Spray on wet coat, making even parallel passes overlapping each pass 50%. Following with a 'cross spray' pass at right angles to first pass. Give special attention to angles, corners, rough spots, edges, etc. to avoid pinholes bare areas and holidays.
4. The application of a wet film thickness of 3 mils (75 microns) will normally provide 2 mils (50 microns) of dry film thickness. Avoid application of wet film thickness in excess of 3 mils, as bubbling may result.
5. To repair or touch up bare areas, pinholes or holidays, simply apply additional materials.
6. In confined areas ventilate with clean air during application and drying until all solvents are removed.
7. Clean all equipment with Thinner or Amercoat 12 immediately after use or at least after each working day or shift.

## Shipping Data

Packaging units	1-gal	5-gal
Shipping weight (approx)	lb	kg
1-gal unit resin	12.8	5.8
5-gal unit resin	62.5	28.4

Shelf life when stored indoors at 40 to 85°F (4 to 29°C)

12 months from manufacture date

## 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.

**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 industrial 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.**

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## Limitation of Liability

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