



**AMERON**  
INTERNATIONAL

Performance Coatings & Finishes

# Amercoat® 872

*High-heat modified zinc silicone primer*

## Product Data/ Application Instructions

- High temperature resistance up to 1000°F (continuous) and 1200°F (peak)
- Low VOC
- Resists thermal cycling
- Excellent corrosion resistance

Amercoat 872 is a high-performance, high-temperature resistant primer for use over uninsulated steel. It is topcoated with Amercoat 873 as part of a complete high-temperature resistant coating system.

### Typical Uses

High temperature, exterior exposures for pipes, stacks, equipment, etc. in:

- Chemical plants
- Power plants
- Oil production, refining plants
- Marine structures, ships
- Cement plants

### 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 a 30:1 pump ratio, or larger, with a fine finish tip. Use the lowest possible pressure to achieve adequate atomization while retaining film thickness control.

**Conventional spray** – Industrial equipment, such as DeVilbiss MBC 510 gun (or equal) with an “E” needle and tip and 704 air cap (or equal). A moisture and oil trap in the main air supply line is essential. Adjust pressure as needed, to achieve adequate atomization.

### Surface Preparation

Coating performance, in general, is proportional to the degree of surface preparation. Abrasive blasting is usually the most effective and economical method. Prior to coating, all surfaces must be clean, dry and free of all contaminants, including salt deposits. Round off all rough welds and sharp edges

**Steel** – Dry abrasive blast, SSPC-SP10. Blast to achieve a 1 to 1½ mils (25 to 38 microns) anchor profile as indicated by a Keane-Tator Surface Profile Comparator, Testex Tape or similar device. Do not exceed 1½ mils (38 microns) anchor profile, as inadequate coverage of profile peaks will occur. Attempts to compensate for excessive blast profile by applying heavier coating dry film thickness will result in film cracking

Apply Amercoat 872 as soon as possible to prevent rusting of blasted surfaces. Spot reblast to remove any contamination.

### Physical Data

Finish	Flat	
Color	Gray	
Components	2	
Curing mechanism	Solvent loss and heat cure	
Volume solids	42 % ± 3%	
Dry film thickness per coat*	1.5-2.0 mils (38-50 microns)	
Coats		
Steel	1	
Theoretical coverage	ft²/gal	m²/L
2 mil (50 microns)	336	8.2
VOC	lb/gal	g/L
unthinned	3.5	420
thinned (1 pt/gal)	3.9	467
Temperature resistance	Dry	
	°F	°C
continuous	1000	538
peak	1200	649
Flash point (SETA)	°F	°C
Amercoat 872	0	-18
Amercoat 65	78	26
Amercoat 12	2	-17

### Application Data

Applied over	Prepared steel,
Surface preparation	Abrasive blast, SSPC-SP10
Method	Conventional spray, airless spray roller or brush

Environmental conditions	
Temperature	°F °C
air	50 to 95 10 to 35
surface	50 to 104 10 to 40
Surface temperatures must be at least 5°F (3°C) above dew point to prevent condensation.	

Drying time*	70°F (21°C)
touch	1 hour
handle	24 hours

\* See note on curing on next page.

Thinner	Amercoat 65
Equipment cleaner	Thinner or Amercoat 12

*\*Do not exceed 2.0 mils DFT. If maximum thickness is exceeded, remove excess coating thickness by abrading, otherwise cracking may occur.*

## Application Procedure

1. Flush all equipment with thinner or Amercoat 12 before use.
2. Stir liquid thoroughly to a uniform consistency.
3. Discard desiccant bag from powder can and gradually stir powder into liquid. Continue stirring until powder is well dispersed, and uniformly blended to a workable consistency.
4. Strain material through 30 mesh screen to remove undispersed material and to prevent possible clogging of equipment.
5. If necessary for workability, thin with up to 1 pint of Amercoat 65 per gallon of Amercoat 872.
6. Adjust spray equipment to apply an even wet coat with minimum overspray.
7. Continue slow stirring during application to maintain uniformity of material.
8. Apply a wet coat in even, parallel passes, holding the spray gun at a right angle 10-12 inches from the surface. Overlap 50 percent to avoid holidays, bare areas and pinholes. If required, cross spray at right angles.
9. When dry to touch, check film thickness with non-destructive dry film thickness gauge such as Elcometer or Mikrotest. Recoat if greater thickness is required. Do not exceed 2.0 mils dry film thickness.
10. Clean all equipment with thinner or Amercoat 12 immediately after use.

## Curing

Equipment coated with Amercoat 872 in the air-dried state can be handled and shipped prior to heat curing as long as appropriate care during handling and shipping is observed. Avoid mechanical abrasion during shipping and handling.

Full properties are attained when the coated surfaces are put into service and have been exposed for at least 1 hour at a temperature of 350°F (177°C) or higher. Continuous operating temperature must not exceed the coating's upper temperature limits 1000°F (538°C). Peak operating temperatures (not to exceed 12 hours duration) must not exceed 1200°F (649°).

## Safety Precautions

Read material safety data sheet before use. 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.***

## Shipping Data

Packaging unit	1-gal	5-gal
liquid	11.6 lbs in 1-gal can	58.1 lbs in 5-gal can
powder	2.3 lbs in 1-pt can	11.3 lbs in 1-gal can
Shipping weight (approx)	lb	kg
1-gal unit		
liquid	12.6	5.7
powder	2.6	1.2
5-gal unit		
liquid	63.1	28.7
powder	12.3	5.6
Shelf life when stored indoors at 40 to 100°F (4 to 38°C)		
liquid	1 year from manufacture date	
powder	2 years from shipment date	

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

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

## 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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