



AMERON
INTERNATIONAL

Performance Coatings & Finishes

Amercoat® 878

Silicone coating

Product Data Application Instructions

- 100% silicone aluminum coating
- High temperature resistance
- Applied on prepared steel or Dimetcote®

Amercoat 878 is a high performance, high-temperature resistance coating. Can be used as a self-priming coating system over abrasive blast cleaned steel. May also be applied over most Dimetcote primers.

Typical Uses

High temperature, exterior exposures for pipes, stacks, etc.

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

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 0.17 fluid tip.

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

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.

Steel – Dry abrasive blast, SSPC-SP10. Blast to achieve a 1 to 1½ mils (25 to 35 microns) anchor profile as indicated by a Keane-Tator Surface Profile Comparator, Testex Tape or similar device.

Apply Amercoat 878 as soon as possible to prevent rusting of blasted surfaces. Spot reblast to remove any contamination.

Dimetcote® – Dimetcote must be properly cured and surface free from contamination or curing residue.

Physical Data

Finish	Semigloss	
Color	Aluminum	
Components	1	
Curing mechanism	Solvent loss and heat cure	
Volume solids (ASTM D2697 modified)	31 % ± 3%	
Dry film thickness per coat	1 mil (25 microns)	
Coats		
Steel	2	
Dimetcote	1-2	
Theoretical coverage	ft²/gal	m²/L
1 mil (25 microns)	497	12.2
VOC	lb/gal	g/L
878	5.4	647
thinned (1 pt/gal)	5.6	671
Temperature resistance	Dry	
	°F	°C
Steel	1000	538
Dimetcote	750	399
Flash point (SETA)	°F	°C
Amercoat 878	82	28
Amercoat 65	78	26
Amercoat 12	2	-17

Application Data

Applied over Prepared steel, stainless steel, Dimetcote

A mist coat/full coat technique may be required to minimize bubbling when applied over inorganic zinc or zinc-rich primers.

Surface preparation Abrasive blast, SSPC-SP10

Method Airless, conventional 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)
 recoat 1 hour

Cure time 2 hours at 300°F (149°C)

Cure can be attained when the coated surfaces are put into service.

Thinner Amercoat 65

Equipment cleaner Thinner or Amercoat 12

Application Procedure

1. Flush all equipment with thinner or Amercoat 12 before use.
2. Stir material thoroughly to a uniform consistency.
3. If necessary for workability, thin with up to 1 pint of Amercoat 65 per gallon of Amercoat 878.
4. Apply a wet coat in even, parallel passes, overlap 50 percent to avoid holidays, bare areas and pinholes. If required, cross spray at right angles. Over inorganic zincs, a mist coat/full coat technique may be required to minimize bubbling.
5. When dry to touch, check film thickness with nondestructive dry film thickness gauge such as Elcometer or Mikrotest. Recoat if greater thickness is required.
6. Clean all equipment with thinner or Amercoat 12 immediately after use.

Curing

Curing can be attained when the coated surfaces are put into service, 2 hours at 300°F (149°C). Operating temperature must not exceed the coating's upper temperature limits 1000°F (538°C)

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	1-and 5-gal units	
Shipping weight (approx)	lb	kg
1-gal	10.0	4.5
5-gal	48.4	20.5

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

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

This 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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