



Performance Coatings & Finishes

# Amercoat® 450SA

*Satin polyurethane topcoat*

## Product Data/ Application Instructions

- Outstanding weather resistance with excellent color and gloss retention
- VOC compliant
- Resistant to broad range of corrosive atmospheres
- Cures through wide temperature range

### Typical Uses

Amercoat 450SA can be used as a finish coat where attractive appearance and a wide range of corrosive resistance is required.

- Chemical plants
- Pulp and paper mills
- Offshore platforms
- Petroleum refineries and containers
- Cargo containers

### Systems Using 450SA

First*	Intermediate	Finish
Coat	Coat	Coat
Dimetcote®	385	450SA

Amercoat 370, 385, 201,  
230, 235, 236, 180

Amerlock® 400 450SA

\*Maximum curing time at 70°F (21°C) for epoxy coatings varies when overcoating with Amercoat 450SA: 400, 385, 370 - 4 weeks; 400 plus 861-1 week.

Amercoat 201 - 1 week @ 70°F (21°C), 3 days @ 86°F (30°C), 1 day @ 113°F (45°C)

Amercoat 230 - 3 weeks @ 32°F (0°C), 2 weeks @ 68°F (20°C), 7 days @ 86°F (30°C), 3 days @ 95°F (35°C)

Amercoat™ 235 - 7 days @ 23°F (-5°C), 5 days @ 86°F (30°C), 2 days @ 104°F (40°C)

### Chemical Resistance Guide

When applied over suitable primer or intermediate coat:

Environment	Splash and Spillage	Fumes and Weather
Acidic	VG	E
Alkaline	VG	E
Solvents	G	E
Salt solutions		
Acidic	E	E
Neutral	E	E
Alkaline	E	E
Water	E	E
G-Good	VG-Very Good	E-Excellent

*This table is only a guide. For specific recommendations, contact your Ameron representative for your particular corrosion protection needs. Amercoat 450SA is not presently recommended for immersion service.*

## Physical Data

Finish	Satin	
Color	Custom colors	
Components	2	
Volume solids (calculated)	64% ± 3%	
Dry film thickness per coat	2 – 4 mils (50 – 100 microns)	
Coats	1 or 2	
Theoretical coverage	ft²/gal	m²/L
1 mil (25 microns)	1027	25.2
4 mils (100 microns)	257	6.3
VOC	lb/gal	g/L
mixed	2.5	300
mixed/thinned (1/2 pt/gal)	2.75	330
Temperature	°F	°C
continuous	200	93
Flash point (SETA)		

resin	46	8
cure	30	-1
Amercoat 911	81	27
Amercoat 12	2	-17

## Application Data

Applied over	Primed steel, primed masonry		
Surface preparation	Clean, free from dirt and oil See primer		
plastic			
steel			
Method	Airless spray or conventional spray		
Mixing ratio (by volume)	4 parts resin to 1 part cure		
Pot life (hours)	90°F/40°C	70°F/21°C	
	2	4	
Environmental conditions			
Temperature	°F	°C	
air	40 to 110	4 to 43	
surface	50 to 110	10 to 43	
Relative humidity			
Surface temperature must be at least 5°F (3°C) above dew point to prevent condensation.			
Dry time (ASTM D1640) (hours)			
	90°F/32°C	70°F/21°C	50°F/10°C
Touch	30 min	1 hr	1 1/2 hr
Through	1 1/2 hrs	8 hrs	24 hrs
Recoat (Minimum	1 hr	4 hrs	8 hrs
(Maximum**) 2 wks			

**\*\*Temperature above 140°F may change gloss.**

## Surface Preparation

Coating performance is, in general, proportional to the degree of surface preparation. All surfaces must be clean, dry and free of all contaminants, including salt deposits.

**Plastic** – Free of mold release compounds. Compatible with a large variety of plastic substrates but a test patch is recommended.

**Steel** – Round off all rough welds and sharp edges, remove all weld spatter.

## 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 0.015 to -0.021-inch orifice.

**Conventional spray** – Industrial equipment, such as DeVilbiss MBC or JGA spray gun, and a pressure material pot with mechanical agitator. A moisture and oil trap in the main air supply and separators for air and fluid pressure are required.

## Application Procedure

1. Flush equipment with thinner or Amercoat 12 before use.
2. Stir resin component thoroughly, then add cure to resin and mix until uniformly blended to a workable consistency. Do not mix more material than will be used within 4 hours at 70°F (21°C). Pot life is shortened by higher temperatures. Thin for workability only, thin with Amercoat 911 up to 1½ pint per gallon.
4. When applying by conventional spray, use adequate air pressure and volume to ensure proper atomization.
5. 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.
6. Application of 3 to 6 mils (75 to 150 microns) wet film thickness will normally provide 2 to 4 mils (50-100 microns) dry film.
7. Clean all equipment with thinner or Amercoat 12 immediately after use.

## 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 mist and solvent 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 interior 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	0.2 gal in a 1-qt can	1 gal in a 1-gal can
resin	0.8 gal in a 1-gal can	4 gal in a 5-gal can

### Shipping weight (approx)

	lb	kg
1-gal unit		
cure	2.0	0.9
resin	11.0	5.0
5-gal unit		
cure	9.2	4.2
resin	54.8	24.9

Shelf life when stored indoors at 40 to 100°F (4 to 38°C)

resin and cure 1 year from shipment date

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

The mixed product is nonphotochemically reactive as defined by the South Coast Air Quality Management District 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.**

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