



Performance Coatings & Finishes

# Amercoat® 385P Series

## Multi-purpose epoxy

## Product Data/ Application Instructions

- Multi-purpose rust inhibitive epoxy primer
- High-solids high-build epoxy intermediate
- Primer for durable systems with wide range of topcoats, including polyurethanes, acrylics, and polysiloxanes
- High build anti-corrosive for ship hulls
- Excellent shop primer for corrosive service
- Suitable for immersion service
- Outstanding chemical and weather resistance
- Excellent adhesion to inorganic zinc silicate
- Easy application
- Contains no lead or chromate pigments
- VOC compliant
- Wide film build range
- Compatible with a variety of substrates and surface preparations

Amercoat 385P Series are a high-performance epoxy coatings forming a tough, abrasion-resistant, durable film. Adheres strongly to bare steel, coated steel and inorganic zinc silicate primed surfaces on new construction, repair and field maintenance projects. Will also adhere to intact painted surfaces and tight rust and may be used to repair itself or inorganic zinc silicate primers.

Amercoat 385P Series provides an excellent barrier to corrosion. It has good chemical resistance, making it suitable for use in aggressive environments. Amercoat 385P Series is user-friendly and can be applied by a variety of methods to produce a smooth, fast-drying film.

Amercoat 385P Series may also be applied over aluminum, stainless steel, galvanizing, concrete and previously coated surfaces in addition to steel.

### Typical Uses

- Decks, superstructures of ships, barges and work boats.
- Piers, offshore platforms and related structures.
- Tank exteriors in oil refineries, paper mills, chemical processing facilities and waste water treatment plants.
- Industrial structural steel, machinery and piping.

## Physical Data

Finish	Flat	
Color	Oxide red	
Amercoat 385P	Oxide red, buff, off-white	
Amercoat 385PA	2	
Components	Solvent release and chemical reaction between components	
Curing mechanism		
Volume solids (ASTM D2697 modified)	66% ± 3%	
Dry film thickness per coat	4 to 6 mils (100 to 150 microns)	
Coats	1 or 2	
Theoretical coverage	ft <sup>2</sup> /gal	m <sup>2</sup> /L
1 mil (25 microns)	1059	26.0
4 mils (100 microns)	265	6.5
<i>385P Series with 880 at 6 mils (150 microns) will be 199 ft<sup>2</sup> per gallon of 385P Series.</i>		
VOC (EPA method 24)	lb/gal	g/L
mixed	2.3	276
mixed/thinned	2.6	311
Temperature	Wet	Dry
	°F °C	°F °C
continuous	140 60	200 93
intermittent	175 79	250 121
Flash point (SETA)	°F	°C
cure	118	48
resin	128	53
Amercoat 861	300	149
Amercoat 7	102	39
Amercoat 65	78	25
Amercoat 101	145	63
Amercoat 12	2	-17

## Application Data

Applied over substrates	Steel, aluminum, galvanizing or coated surfaces	
Method	Airless, conventional spray, brush or roller	
Mixing ratio (by volume)	1 part resin to 1 part cure	
Pot life (hours)		
	°F/°C	
90/32	70/21	50/10
1 1/2	3	5

## Environmental conditions

Temperature	°F	°C
air and surface	40 to 120	4 to 49
Surface temperatures must be at least 5°F (3°C) above dew point to prevent condensation.		

\* Availability: 385PA- United States; 385P - Europe

## Amercoat 385P Series Chemical Resistance Guide

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

*This chart shows typical resistance of Amercoat 385P or 385PA. Contact your Ameron representative for your specific requirements.*

## Systems Using Amercoat 385P Series

1st Coat	2nd Coat	3rd Coat
Amercoat 385P Series	-	-
Amercoat 385P Series	Amershield™	-
Amercoat 385P Series	450 Series	-
Dimetcote® 9, 9FT, 9HS	385P Series	Amershield, 450 Series
Amercoat 68 Series	385P Series	Amershield, 450 Series

*Confirm compliance with VOC regulations before using coating systems.*

*Over Dimetcote, Amercoat 68 Series primers, a mist coat/full coat and thinning with Amercoat 101 may be required to prevent application bubbling.*

Adhere to all application instructions, precautions, conditions and limitations to obtain the maximum performance. When used over recommended primers, refer to Application Instructions for the specific primer being used for surface preparation data and application and drying procedures. For conditions outside the requirements or limitations described, contact your Ameron representative.

## Surface Preparation

Coating performance is proportional to the degree of surface preparation. Round off all rough welds and remove all weld spatter.

**Steel** – Remove all loose rust, dirt, grease or other contaminants by one of the following depending on the degree of cleanliness required: SSPC-SP2, 3, 6 or 7. Water blasting is also acceptable. For more severe service, clean to SSPC-SP10. The choice of surface preparation will depend on the system selected and end-use service conditions.

Blast to achieve an anchor profile of 1-2 mils (25-50 microns) as indicated by a Keane-Tator Surface Profile Comparator or Testex Tape. Increase coating thickness if profile greater than 3 mils.

**Aluminum** – Remove oil, grease or soap film with neutral detergent or emulsion cleaner; treat with Alodine® 1200, Alumiprep® or equivalent or blast lightly with fine abrasive.

**Galvanizing** – Remove oil or soap film with neutral detergent or emulsion cleaner; then use zinc treatment such as Galvaprep® or equivalent or blast lightly with fine abrasive.

**Repair** – Prepare damaged areas to original surface preparation specifications, feathering edges of intact coating. Thoroughly remove dust or abrasive residue before touch up.

Drying time (ASTM D1640) @ 6 mils, DFT (hours)

	°F/°C			
	90/32	70/21	50/10	32/0
touch through	1 10	2 16	3 24	6 168
Topcoat or recoat time minimum	6	8	10	72

*Addition of 861 Accelerator does not change dry-to-touch or dry-through times but does accelerate cure for service.*

Topcoat or recoat time (days) (maximum)	90/32	°F/°C	70/21	50/10
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Product	90/32	70/21	50/10
450 Series, Amershield™ 385P Series	14	30	42
non-immersion	14	30	42
immersion	No maximum – Clean surface required 6 months – high pressure water wash or roughen surface if exceeded		

Time before service @ 8 mils (hours)	°F/°C	90/32	70/21	50/10	32/0
non-immersion		12	24	36	168

Thinners (up to 1/2 pt)  
above 70°F (21°C)      Amercoat 7 or 101  
below 70°F (21°C)      Amercoat 65

*In confined areas thin with Amercoat 7 or 101*

Equipment cleaner      Thinner or Amercoat 12

## Application Equipment

**Airless spray** – Standard equipment such as Graco Bulldog or larger with a 0.15- to 0.021- in. (0.38 to 0.53 mm) fluid tip.

**Conventional spray** – Industrial equipment such as DeVilbiss MBC or JGA spray gun with 78 or 765 air cap and “E” fluid tip, or Binks No. 18 or 62 gun with a 66 x 63PB nozzle set up. Separate air and fluid pressure regulators, mechanical pot agitator, a moisture and oil trap in the main air supply line are recommended.

**Power mixer** – Jiffy Mixer powered by an air or an explosion-proof electric motor.

**Brush** – Natural bristle. Maintain wet edge.

**Roller** – Use industrial roller. Level any air bubbles with bristle brush.

## Application Procedure

Amercoat 385P Series consists of two components which must be mixed together before use. It is packaged in the proper portions in 2 or 5-gallon units.

1. Flush equipment with thinner or Amercoat 12 before use.
2. Stir each component thoroughly, then combine resin and cure and mix until uniform.
3. Thin only if necessary for workability, add Amercoat 101 up to 1/2 pint (approximately 6%) per gallon of Amercoat 385P Series. Use Amercoat 65 when faster drying is desired. Use Amercoat 7 or 101 when applying in confined spaces. Use only Ameron recommended thinners.
4. Do not mix more material than will be used within pot life. Pot life is shortened by higher temperatures.
5. For conventional spray, use adequate air pressure and volume to ensure proper atomization.
6. Apply a wet coat in even, parallel passes; overlap each pass 50 percent. If required, cross-spray at right angles to avoid holidays, bare areas and pinholes.

7. Normal recommended dry film thickness per coat is 4 to 6 mils. However, if greater thickness is applied in local areas because of overlapping, no runs or sags will normally occur at a dry film thickness up to 10 mils for 385P Series. Total dry film thickness in two coats must not exceed 16 mils for 385P Series.
8. A wet film thickness of 6 mils (150 microns) normally provides 4 mils (100 microns) of dry film.
9. When using brush or roller application method, additional coats may be required to achieve proper film thickness.
10. 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 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	2 and 5-gal units	
385P Series		
Shipping weight (approx.)	lb	kg
385P Series 2-gal unit		
cure 1 gal in 1-gal can	12	5.6
resin 1 gal in 1-gal can	13	6.0
385P Series 5-gal unit		
cure 2.5 gal in 5-gal can	31	14.3
resin 2.5 gal in 2 <sup>1</sup> / <sub>2</sub> -gal can	34	15.3

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

cure, resin and paste 1 year from shipment date

Numerical values are subject to normal manufacturing tolerances, color and testing variances. Allow for application losses and surface irregularities. See application instructions for complete information and safety precautions.

The mixed product is photochemically reactive as defined by the 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 invoices 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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