AMERCOAT® 385

August 2012
Revision of July 2012

DESCRIPTION

Multi-Purpose Polyamide Epoxy Coating

PRINCIPAL CHARACTERISTICS

- Multi-purpose high build epoxy
- High solids high build epoxy intermediate coat
- Compatibility with a wide range of substrates and surface preparations
- *Amercoat* 385PA contains zinc phosphate for enhanced corrosion inhibitive performance

COLOR AND GLOSS

White, Black, Oxide Red, Buff, Pearl Gray

Flat

Amercoat 385PA Red (MIO containing formula), *Amercoat* 385PA Buff (no MIO)

* *Epoxy coatings will characteristically chalk and fade upon exposure to sunlight. Light colors are prone to ambering to some extent.*

BASIC DATA

Volume solids	68% ± 3%
VOC	2.6 lbs/gal (312 g/L)
Recommended Dry film thickness	4 – 8 mils per coat (100 – 200 microns)
Theoretical Spread Rate	@ 1 mils 1090 ft²/gal @ 5 mils 218 ft²/gal
Components	2
Shelf Life	3 years from date of manufacture

SURFACE PREPARATION

Coating performance is, in general, proportional to the degree of surface preparation. Abrasive blasting is usually the most effective and economical method.When this is impossible or impractical, *Amercoat* 385 can be applied over mechanically cleaned surfaces. All surfaces must be clean, dry and free of all contaminants, including salt deposits. Contact PPG for maximum allowable salt containment levels.

Mild Steel

– Remove all loose rust, dirt, grease or other contaminants by one of the following depending on the degree of cleanliness required: SSPC SP-2, 3, 6, 7 or 10 (ISO 8501-1 St-2, St-3, Sa 1, Sa 2.5). These minimum surface preparation standards apply to steel that has been previously abrasive blasted. The choice of surface preparation will depend on the system selected and end-use service conditions.

For more severe service and immersion, clean to SSPC SP-10 (ISO8501-1 Sa 2.5). Blast to achieve an anchor profile of 1.0-5.0 mils (50-75microns) as indicted by a Keane-Tator Surface profile Comparator or Testex Tape. For immersion and severe duty applications, the recommended blast profile is 2.0-4.0 mils (50-100 microns). Previously blasted steel may be ultra-high pressure water jetted to SSPC -SP WJ-2(L) / NACE WJ-2(L). The wet surface can be dried by blowing with dry compressed air giving special attention to horizontal surfaces and recesses.

Concrete

– Prepare / clean surface in accordance with SSPC SP-13 guidelines. Abrade surface per ASTM D-4259 to remove all efflorescence and laitance, to expose sub-surface voids, and to provide a surface roughness equivalent of 60 grit sandpaper or coarser. Test for moisture by conducting a plastic sheet test in accordance with ASTM D4263. Fill voids as necessary with *Amercoat* 114A epoxy filler.

Galvanized Steel

– Remove oil or soap film with detergent or emulsion cleaner. Lightly abrasive blast with a fine abrasive in accordance with SSPC SP-16 guidelines to achieve a profile of 1.5 - 3.0 mils. When light abrasive blasting is not possible, galvanizing can be treated with a suitable zinc phosphate conversion coating. Galvanizing that has at least 12 months of exterior weathering and has a rough surface with white rust present may be over-coated after power washing and cleaning to remove white rust and other contaminants. The surface must have a measurable profile. A test patch is recommended to confirm adhesion. Not recommended over chromate sealed galvanizing without blasting to thoroughly remove chromates. Adhesion problems may occur.

Non-Ferrous Metals and Stainless Steel	–	Abrasive blast in accordance with SSPC SP-16 guidelines to achieve a uniform and dense 1.5-4.0 mil anchor profile. Size and hardness of abrasive should be adjusted as necessary based on the hardness of the substrate. Aluminum may be treated with a surface treatment compliant with Mil-DTL-5541 or equivalent (non-immersion applications only).
Aged coatings	–	All surfaces must be clean, dry, tightly bonded and free of all loose paint, corrosion products or chalky residue. Abrade surface, or clean with Prep 88. *Amercoat* 385 is compatible over most types of properly applied and tightly adhering coatings, however, a test patch is recommended to confirm compatibility.
Repair	–	Prepare damaged areas to original surface preparation specifications, feathering edges of intact coating. Thoroughly remove dust or abrasive residue before touch-up.

ENVIRONMENTAL CONDITIONS

Ambient temperatures	40°F to 122°F (5°C to 50°C) Surface temperature must be at least 5°F above the dew point temperature.
Material temperatures	50°F to 90°F (10°C to 32ºC)
Relative humidity	85% maximum
Surface temperature	Must be at least 5°F above dew point temperature.
General air quality	Area should be sheltered from airborne particulates and pollutants. Avoid combustion gases or other sources of carbon dioxide that may promote amine blush. Ensure good ventilation during application and curing. Provide shelter to prevent wind from affecting spray patterns.

INSTRUCTIONS FOR USE

Mixing ratio by volume

1 parts base to 1 part hardener

Pre-mix pigmented components with a pneumatic air mixing at moderate speeds to homogenize the container. Add hardener to base and agitate with a power mixer for 1-2 minutes until completely dispersed.

Pot life

50°F	70°F	90°F
5 hours	3 hours	1.5 hours

Induction time

Below 60°F	60-75°F	Above 75°F
30 minutes	15 minutes	Not required

Airless spray	45:1 pump or larger, 0.017-0.019 fluid tip Can be applied with plural component equipment
Air spray	Thin up to 20%, standard conventional equipment, 0.070” fluid orifice
Brush & roll	Use a high quality natural bristle brush and / or solvent resistant, 3/8” nap roller. Ensure brush / roller is well loaded to avoid air entrainment. Multiple coats may be necessary to achieve adequate film build.
Thinner	*Amercoat* 65 (xylene), *Amercoat* 101 (recommended for > 90°F)
Cleaning solvent	*Amercoat* 12 Cleaner or *Amercoat* 65 thinner (xylene)
Primers	Direct to substrate; *Dimetcote*- series primers, *Amercoat* 68HS, *Amercoat* 68MCZ
Topcoats	*Amercoat* 450-Series Polyurethanes, *Amershield*, *PSX* 700, *Amercoat* 229T, *PSX* ONE, *Pitthane* Polyurethanes
Safety precautions	For paint and recommended thinners see safety sheet 1430, 1431 and relevant material safety data sheets This is a solvent borne paint and care should be taken to avoid inhalation of spray mist or vapor as well as contact between the wet paint and exposed skin or eyes.

DRY/CURE TIMES

Amercoat 385 @ 6 mils dft

	40°F	50°F	60°F	70°F	90°F
Dry to touch	8 hours	4 hours	3 hours	2 hours	1 hours
Dry through	96 hours	24 hours	20 hours	16 hours	10 hours
Dry to recoat / topcoat	72 hours	42 hours	24 hours	12 hours	6 hours
Max recoat, self, immersion	30 days or 6 months (when cleaned with Prep 88 according to the instructions)				
Max recoat, self, atmospheric	No maximum (when cleaned with Prep 88 according to the instructions)				
Max topcoat, urethanes, *PSX*	60 days	42 days	36 hours	30 days	14 days
Cure to immersion	10 days	3 days	2.5 days	2 days	1 day

** *Dry times are dependent on air and surface temperatures as well as film thickness, ventilation, and relative humidity. Maximum recoating time is highly dependent upon actual surface temperatures – not simply air temperatures. Surface temperatures should be monitored, especially with sun-exposed or otherwise heated surfaces. Higher surface temperatures shorten the maximum recoat window.*

Surface must be clean and dry. Any contamination must be identified and removed. A detergent wash with Prep 88 or equivalent is recommended prior to application of topcoats after 30 days of exposure. However, particular attention must be paid to surfaces exposed to sunlight where chalking may be present. In those situations, a further degree of cleaning may be required. PPG Technical Service can advise on suitable cleaning methods. If maximum recoat/topcoat time is exceeded, then roughen surface

PRODUCT QUALIFICATIONS

- Mil-PRF-23236(C) Type V, Class 7, Grade C
- Military Sealift Command – Underwater hulls, topside and salt water ballast tank service
- Compliant with USDA Incidental Food Contact Requirements
- NFPA Class A for Flame Spread and Smoke Development
- AWWA C210-98
- NORSOK M501 Rev. 5, System 7 Subsea surfaces
- MPI Category #108

AVAILABILITY

Packaging

Available in 2-gallon and 10-gallon kits
2-gallon kits have 1 full gallon of base and 1 full gallon of hardener
10-gallon kits have 5-gallons of base and 5-gallons of hardener

Inventory

Global availability

Product codes

AT 385-1	Buff base
AT 385-3	White base
AT 385-9	Black base
AT 385-23	Pearl Gray base
AT 385-72	Oxide Red base
AT385A-1	*Amercoat* 385PA Buff (contains zinc phosphate)
AT385A-7	*Amercoat* 385PA Red (contains micaceous iron oxide)
AT385-B	hardener component (hardener for 385 and 385PA)

Worldwide statement

While it is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

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The data contained herein are liable to modification as a result of practical experience and continuous product development.

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