Amercoat 385

Multi-purpose epoxy *(385 Series)*

Product Data/ Application Instructions

- **Excellent durability in both marine and industrial environments**
- **Compatible over inorganic zincs**
- **Outstanding chemical and weather resistance**
- **Suitable for immersion service**
- **Self-priming, economical, long-term protection**
- **Adheres to a variety of substrates such as steel, aluminium, stainless steel, concrete and previously coated surfaces**
- **Wide film build range**
- **Also available in MIO**
- **Also available as rust inhibitive pigmented version (Amercoat 385PA)**

Amercoat 385 is a high build polyamide epoxy with high solids content designed for industrial and marine use. It adheres strongly to bare steel, primed steel and inorganic zinc silicate coatings on new construction, repairs and field maintenance projects. Amercoat 385 provides an excellent barrier to corrosion; its inhibitive pigment version (385PA) affords corrosion inhibition at damage areas. Amercoat 385 can be applied by a variety of spray methods to produce a smooth fast-drying high build film. Amercoat 385 may be overcoated with itself in non-immersion conditions for an unlimited period. Antifoulings must be applied to Amercoat 385 while the film is still soft to the fingernail.

Typical uses

MARINE- Decks, hulls, superstructures and ballast tanks of ships, barges and workboats.
INDUSTRIAL – Tank exteriors, structural steel pipes in chemical plants, refineries, pulp and paper mills and waste water treatment plants. Offshore platforms, jetties and other structures exposed to severe weathering, water, salt spray, immersion or aggressive chemical environments.
Amercoat 385 is an alternative for traditional coaltar epoxies and is suitable for immersion in both salt and fresh water. It is specifically suitable as marine ballast water tanklining.
Amercoat 385 can be topcoated with amongst others PSX 700, Amercoat 440 and Amercoat 450S.
NOTE: For immersion service use only the standard colours oxide red, RAL 7036 or RAL 1013, other colours available on request in special occasions.

Physical data

Finish	flat			
Colour				
Amercoat 385	White, Oxide Red, RAL 1013, RAL 7035, RAL 7035MIO, RAL 7036, Black			
Amercoat 385PA	Oxide red, Buff			
Components 385 or 385PA	2			
Mixing ratio (by volume)				
Resin	1 part			
Cure	1 part			
Curing mechanism	solvent release and chemical reaction between components			
Volume solids 385 or 385PA	68% (ISO 3233)*			
VOC	16% by weight	225 g/l	2.3 lb/gal	
Dry film thickness 385 or 385PA	100 – 200 µm per coat	4 –8 mil per coat		
Number of coats	1 or 2**			
Theoretical coverage				
At 100 microns/4 mil dft	6.8 m^2/l	265 ft^2/gal		
At 200 microns/8 mil dft	3.4 m^2/l	133 ft^2/gal		

Temperature resistance	Dry		Wet	
	°C	°F	°C	°F
Continuous	93	200	60	140
Intermittent	120	250	79	175

Flashpoints	°C	°F
Cure	43	109
Resin	25	77
Mixed	25	77
Amercoat 9HF	26	79
Amercoat 65	24	75
Amercoat 12	24	75

Thinners	Amercoat 9HF or Amercoat 65
Cleaner	Amercoat 12

* Volume solids is measured in accordance with ISO 3233. Slight variations ±3% may occur due to colour and testing variances.

** For immersion service, apply 2 coats of Amercoat 385 at a minimum of 300µm total dry film thickness

Chemical Resistance Guide

When applied over suitable primer or intermediate coat:

Splash and Environment	Fumes and Spillage	Weather
Acidic	Very good	Excellent
Alkaline	Very good	Excellent
Salt solutions		
Acidic	Excellent	Excellent
Neutral	Excellent	Excellent
Alkaline	Excellent	Excellent
Water	Excellent	Excellent

This table is only a guide. For specific recommendations, contact your Ameron representative for your particular corrosion protection needs.

Global Systems using Amercoat 385

ISO 12944 classifica-tion	**First coat**	**Intermediate**	**Finish Coat**
C5	Dimetcote		Amercoat 385
C5	Amercoat 68 Series	Amercoat 385	Amercoat 450 Series
C4	Amercoat 385	Amercoat 385	Amercoat 450 Series
C3	Amercoat 385		Amercoat 450 Series
I5	Amercoat 385		Amercoat 385

Surface Preparation

PRIMED STEEL - Coating performance is proportional to the degree of surface preparation. Refer to specifications of the specific primer being used. Prior to coating, primed surface must be clean, dry, undamaged and free of all contaminants including salt deposits. Round of all rough welds and remove weld spatter.

Use Amercoat 385PA when inhibitive pigmented primer is specified.

Application Equipment

The following equipment is listed as a guide and suitable equipment from other manufacturers may be used. Adjustments of pressure and change of tip size may be needed to obtain the proper spray characteristics.
AIRLESS SPRAY Standard airless spray equipment, such as Graco, DeVilbiss, Nordson-Bede, Spee-Flo or others having a 0.015 to 0.021 inch (0.38 to 0.53 mm) fluid tip.
CONVENTIONAL SPRAY Industrial equipment such as DeVilbiss MBC or JGA gun with 78 or 765 air cap and "E" fluid tip and heavy mastic spring or Binks No. 18 or 62 with a 66 x 63 PB nozzle setup. Separate air and fluid pressure regulators, mechanical pot agitator and a moisture and oil trap in the main air supply line are recommended.
MIXER Use power mixer powered by an air motor or an explosion proof electric motor.

Application Data

Substrate ..... Steel, aluminium, galvanizing, tightly adhering coatings

Surface preparation
- Steel..... Abrasive blast cleaning
- Concrete ..... Abrasive blast cleaning
- Aluminium ..... Chemical conversion or light sweepblast
- Galvanizing ..... Amercoat 59 TW or light sweep blast

Application method..... Airless or conventional spray. Touch-up of small areas can be made by brush or roller.

Mixing ratio (volume)
- Resin..... 1 part
- Cure ..... 1 part

Environmental conditions

Air temperature.....	5-50 °C	41-122 °F
Surface temperature.....	5-60 °C	41-140 °F

Surface temperature must be at least 3°C / 5°F above the dew point to prevent moisture condensation on the surface.

Potlife (°C/°F)	32/90	21/70	10/50
	1½ hrs	3 hrs	5 hrs

Drying times (°C/°F)	32/90	21/70	10/50
Dry to touch	1 hr	2 hrs	3 hrs
Dry through.....	10 hrs	16 hrs	23 hrs

Recoat or topcoat times (°C/°F)	32/90	21/70	10/50
Minimum time	6 hrs	16 hrs	23 hrs
Maximum time	not limited		

Maximum recoating/topcoating time intervals are dependent on temperature, degree of weathering, type of topcoat, and service conditions of the complete coating system. Consult your Ameron representative for specific recommendations.

Drying times are dependent on temperature, ventilation and film thickness.

Thinner ..... Amercoat 9 HF or Amercoat 65

Equipment cleaner ..... Amercoat 12

Application Procedure

Amercoat 385 is packaged in the proper mixing proportions of resin and cure.

Resin	10 L (2.6 gal) in 20 L can
Cure	10 L (2.6 gal) in 13 L can

Thinner: Amercoat 9HF or Amercoat 65
Cleaner: Amercoat 12

1. Flush equipment with Amercoat 12 before use.
2. Stir resin (in the larger container) to an even consistency with a power mixer.
3. Add cure to resin solution and continue stirring for 5 minutes.
   NOTE: Since the potlife is limited and shortened by high temperatures, do not mix more material than will be used in 3 hours at 20°C.
4. Thin only if necessary for workability, add up to 10% by volume of thinner.
5. Apply a wet coat in even, parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays. When applying directly over inorganic zincs at full thickness, bubbling may occur. A test patch is recommended and if bubbling occurs, apply a "mist coat". Consult your Ameron representative for further information.
6. Double coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc.
7. Application at 220 µm wet film thickness will normally provide 150 µm dry film.
8. Check thickness of dry coating with a non-destructive dry film thickness gauge, such as Mikrotest or Elcometer. If less than specified thickness, apply additional material as needed.
9. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas by spray.
10. In confined areas ventilate with clean air during application and drying until all solvents are removed. Temperature and humidity of ventilating air must be such that moisture condensation will not form on surface.

For conventional spray, use adequate air pressure and volume to ensure proper atomisation.

Normal recommended dry film thickness is 100 to 200 µm. 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 250 µm. Total dry film thickness must not exceed 400 µm.

11. Clean all equipment with Amercoat 12 immediately after use or at least after each working day or shift. When left in spray equipment, Amercoat 385 will cure and cause clogging.

Shipping Data

Packaging

Resin	10 L (2.6 gal) in 20 L can
Cure	10 L (2.6 gal) in 13 L can

Shipping weight	kg	lb
Resin	approx. 16.5	36
Cure	approx. 15	33

Shelf life

Resin and cure	1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C (41 to 104°F)

Caution
This product is flammable. Keep away from heat and open flame. Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

1. circulate adequate fresh air continuously during application and drying;
2. use fresh air masks and explosion proof equipment;
3. prohibit all flames, sparks, welding and smoking.

Do not empty into drains. Take precautionary measures against static discharges. For specific information on hazardous ingredients, required ventilation, possible consequences of contact and safety measures see Safety Data Sheet.

Safety
Since improper use and handling can be hazardous to health and cause of fire or explosion, safety precautions included with application instructions must be observed during all storage, handling, use and drying periods.
To avoid any confusion that may arise through translation into other languages, the English version of the Product Data/Application Instructions will be the governing literature and must be referred to in case of deviations with product literature in other languages.

Warranty
Ameron warrants its products to be free from defects in material and workmanship. Ameron's sole obligations and Buyer's exclusive remedy in connection with the products shall be limited, at Ameron's option, to either replacement of products not conforming this warranty or credit to Buyer's account in the invoiced amount of the non-confirming 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 non-conformance as required herein shall bar Buyer from recovery under this warranty.

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In no event shall Ameron be liable for consequential or incidental damages.

Condition of Sale
All our transactions are subject to our Terms and Conditions of Sale.

Andrews Coatings Ltd
Carver Building, Littles Lane, Wolverhampton. WV1 1JY.
Tel: 01902 429190 Fax: 01902 426574 www.amerondirect.co.uk info@andrewscoatings.co.uk

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