



Amercoat 370



Fast Dry Epoxy Coating

(370 Series)

Product Data/ Application Instructions

- High build epoxy coat
- High performance, high corrosion resistance
- Fast drying, fast curing
- Application over wide range of surface temperatures
- Accepts a wide range of topcoats
- Compatible with inorganic zinc silicate primers
- No lead pigments added
- Low VOC

Typical Uses

Tank exteriors, structural steel and piping in chemical plants, refineries, pulp & paper mills, offshore platforms, ship hulls and other structures exposed to severe weathering or salt spray. Obtain specific recommendations from your Ameron representative when using Amercoat 370 for water immersion service conditions.

Outstanding Characteristics

Amercoat 370 forms an excellent corrosion barrier and is suitable for most industrial and marine new construction, repair and field maintenance applications, where an epoxy coating is required in low temperature conditions. The fast curing properties of Amercoat 370 make it especially beneficial as a shop-applied coating where fast drying and handling of coated parts are required. Amercoat 370 is user friendly and can be applied by a variety of spray application methods over a broad temperature range.

Chemical Resistance Guide

Environment	Splash and spillage	Fumes and weathering
Acidic	Fair	Good
Alkaline	Excellent	Excellent
Solvents	Excellent	Excellent
Salt solutions		
Acidic	Good	Very Good
Neutral	Excellent	Excellent
Alkaline	Excellent	Excellent
Water	Excellent	Excellent

This chart is only a guide to show typical resistances of Amercoat 370 with suitable topcoats. Your Ameron representative will help you evaluate your particular corrosion protection needs and make the correct recommendation for your specific requirements.

Physical Data

Finish	flat
Colour	black, oxide red, RAL 7035, RAL 1013
Components	2
Mixing ratio (by volume)	
resin	4 parts
cure	1 part
Curing mechanism	solvent release and chemical reaction between components
Dry film thickness	100 - 150 µm (4 - 6 mils) per coat
Number of coats	1 or 2
Volume solids	66% (ISO 3233) *
VOC	17% by weight 300 g/l 2.5 lbs/gal
Calculated coverage	
at 100 µm (4 mils)	6.6 m ² /l (269 ft ² /gal)
at 150 µm (6 mils)	4.4 m ² /l (179 ft ² /gal)
Allow for application losses, surface irregularities, etc.	
Specific gravity	1.73 kg/l (mixed product)
Flash points (Closed Cup).....	°C °F
resin	28 82
cure	28 82
Amercoat 65	24 75
Amercoat 12	24 75
Thinner	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.

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Systems using Amercoat 370

1 st Coat	2 nd Coat	3 rd Coat
Dimetcote 9 Series	Amercoat 370	Amercoat 450 Series or Amercoat 229 Series
Amercoat 68 Series	Amercoat 370	Amercoat 450 Series or Amercoat 229 Series
Amercoat 370	Amercoat 370	Amercoat 450 Series or Amercoat 229 Series
Amercoat 385	Amercoat 370	ABC Antifouling

Approvals and Certificats

With suitable primer and topcoat, complies with the following standards:

- ISO 12944 (class C5M)
- Shell specification ES/011 Vol. 2 Rev. 7

Approved primer for miscellaneous fire proofings.

Application Data Summary

Like all high performance coatings, Amercoat 370 must be applied as recommended to obtain the maximum performance.

Amercoat 370 is a fast dry epoxy coating suitable for low temperature or fast handling applications. To obtain the maximum performance for which Amercoat 370 is formulated, strict adherence to all application instructions, precautions, conditions and limitations is necessary. If conditions exist that are not within the requirements or limitations described, consult your Ameron representative.

Surface Preparation

Coating performance is in general, proportional to the degree of surface preparation. Surface must be clean, dry, undamaged and free of all contaminants prior to coating. STEEL: blast steel surfaces to a minimum of Sa 2½ in accordance with Swedish Standard SIS 05 5900 - 1967, ISO 8501-1 or SSPC-SP-10. NOTE: blast to achieve a surface profile not to exceed 75 µm as determined with *Testex* Tape or similar instrument. Remove abrasive residues and dust from surface.

PRIMED STEEL: Prepare surface in accordance with application instructions for the specific primer being used. Be sure primer is clean and dry when Amercoat 370 is applied. Remove all loose rust, dirt, moisture, grease or contaminants.

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

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 28:1 or higher pump ratio and a fluid tip with a 0.38 to 0.53 mm (0.015 to 0.021 inch) orifice.

Application Data

Substrate blasted or suitably primed steel

Application airless or conventional spray, brush and roller

Environmental Conditions (during application and drying)

Air temperature: -7 to 50°C 19 - 122°F

Surface temperature: -7 to 50°C 19 - 122°F

Material temperature: 4°C/39°F minimum

Surface temperature must be at least 3°C/5°F above dew point to prevent moisture condensation on the surface. Never apply coatings under adverse environmental conditions. Ensure the application of a closed film by adapting the spray technique. Ensure good ventilation when applied in confined areas to assist evaporation and elimination of solvents.

Potlife (at 20°C/68°F) 4 hours

Drying Times (at 125 µm/5 mils) dft) °C/°F

	0/32	10/50	20/68	30/86
dry to touch (minutes).....	60	30	15	10
dry through (hours).....	24	8	5	2
dry to recoat (hours).....	12	4	2	1

Potlife and drying times are dependent on temperature and quantities mixed.

NOTE: Drying times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions. Times are proportionally shorter at higher temperature and longer at lower temperatures. Prior to recoating ensure the surface is clean. Maximum recoating time depends on coating system to be used. Consult your Ameron representative for specific recommendations.

Topcoat or Recoat Times (maximum)

Amercoat 450 Series 6 months

Amercoat 229 Series 30 days

Amercoat 370

non-immersion 6 months

immersion 1 month

clean and roughen when maximum is exceeded

ABC Antifouling..... apply while 370 is tacky, soft to fingernail.

Failure to apply antifouling while coating is still tacky or soft to fingernail may result in poor adhesion and possible delamination.

Time before Service (at 200 µm/8 mils, in hours, °C/°F)

	0/32	10/50	20/68	30/86
non-immersion *.....	96	24	12	6
immersion.....	168	48	24	12

* cure to full physical properties

Amercoat 370 is not recommended for immersion when cured below 0°C.

Thinner Amercoat 65

Cleaner Amercoat 12



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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 and a mechanical pot agitator are recommended. A moisture and oil trap in the main air supply line is essential.

MIXER - Use power mixer powered by an air motor or an explosion proof electric motor.

Application Procedure

Amercoat 370 is packaged in the proper mixing proportions of resin and cure.

Resin 16 l (4.2 gal) in 20 l can
Cure 4 l (1.06 gal) in 5 l can

1. Flush equipment with recommended cleaner before use.
2. Stir each of the components prior to mixing to an even consistency with a power mixer.
3. Add cure to resin, 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 within the potlife period.
4. For conventional spray, thin only as needed for workability with no more than 10% of recommended thinner. Thinning is normally not needed for airless spray.
5. Stir during application to maintain uniformity of material. Apply a wet coat by even, parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.
6. Double coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc.
7. Application at 190 µm (7.6 mils) wet film thickness will normally provide 125 µm (5 mils) dry film. Normal recommended dry film thickness is 125 µm (5 mils). Total dry film thickness must not exceed 375 µm (15 mils).
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. When applying by conventional spray, use adequate air pressure and volume to ensure proper atomization.
11. When applying over inorganic zinc or zinc rich primers, a "mist coat" (25-35 µm (1 - 1.4 mils) wet) full coat technique may be required to minimise bubbling. This will depend on the age of the primer, surface roughness and conditions during curing. When applying Amercoat 370 over Dimetcote at 15°C/59F and above, use Amercoat 65 thinner up to 10% per litre.
12. 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.
13. Clean all equipment with recommended cleaner immediately after use or at least at the end of each working day or shift. When left in spray equipment, Amercoat 370 will cure and cause clogging.

Shipping Data

Packaging
resin 16 l (4.2 gal) in 25 l can
cure 4 l (1.06 gal) in 5 l can

Shipping weight
resin approx. 28 kg
cure approx. 5 kg

Shelf life
resin/cure 1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C (41-104°F).

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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 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, exposure 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.

Ameron makes no other warranties concerning the product. No other warranties, whether express, implied or statutory, such as warranties of merchantability or fitness particular purpose, shall apply. In no event shall Ameron be liable for consequential or incidental damages.

Any recommendations or suggestion relating to the use of the products made by Ameron, whether in its technical literature, or response to specific enquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyer's having requisite skill and know-how in the industry, and therefore it is 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, as its sole descretion 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.

Condition of Sale

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