



Amercoat 4371

Epoxy zinc phosphate primer

formerly Steelguard 3371

Product Data/ Application Instructions

- Superior, fast drying two pack epoxy primer
- EPA compliant as a blast primer
- Complies with BS 5493:1977 - Table 4A Type AP1A
- BBA HAPAS approval
- Excellent adhesion to blast cleaned steel

Typical Uses

Anticorrosive blast primer for general structural steel, primer over T-Washed galvanized steel and as a sealer for aluminium metal sprayed steel in Highways Agency specifications for bridge bearings, CCTV masts and lighting columns operating in a wide range of environmental conditions.

Approvals

Amercoat 4371 is approved and registered to BBA HAPAS Roads and Bridges Certificate Reference 05/H116 (Highways Agency specification item 110).

Physical Data

Finish	low sheen
Colour	approx. BS 08C35
Components	2
Curing mechanism	solvent release and reaction between components. Effective cure down to 5°C/41°F
Volume solids	49+/-2%
VOC	520 g/l
Dry film thickness	20-50 µm per coat
	typical minimum maximum
Dry film thickness (µm)	25 20 50
Wet film thickness (µm)	51 41 102
(wet film thicknesses quoted are typical for one airless spray coat)	
Number of coats	1
Calculated coverage	19.6 m ² /l at 25 µm
Allow for application losses, surface irregularities, etc.	
Drying time (at 20°C/68°F)	
dry to handle	1½ hours
dry to recoat	4 hours
Induction time (at 20°C/68°F)	not applicable
Mixing ratio (by volume)	
resin	4 parts
cure	1 part
Thinner	Amercoat 18
Cleaner	Amercoat 12
Specific gravity	1.37 kg/l (mixed product)
Flash points (Closed Cup).....	°C °F
resin	11 52
cure	10 50
Amercoat 18	25 77
Amercoat 12	24 75



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Surface preparation

STEEL: Abrasive blast clean to ISO 8501-1, Sa2^{1/2}. The blast profile achieved should be within the range 50 to 100 microns. Priming should occur before degradation of the surface takes place. If oxidation occurs then the surface should be re-prepared.

METAL SPRAY: Should be applied to the metal spray surface within 4 hours of the metal spray application. In all cases the surface must be dry and free of dust, salts, grease and other contaminants immediately before coating.

GALVANIZED STEEL: Ideally, lightly sweep blast with fine abrasive. Where this is impractical thoroughly degrease the surface and apply Amercoat 59TW in accordance with the product data instructions. In all cases the surface must be dry and free of dust, salts, grease and other contaminants immediately before coating.

Mixing

Stir the resin component thoroughly, then add the cure and continue mixing until the product is uniform throughout. A powerful mixer should be used.

Application

AIRLESS SPRAY: Use standard airless spray equipment capable of producing a minimum pressure at the tip of 2800 psi (200 kg/cm²). Tip size range 15-17 thou (0.38-0.43mm). Adjustments to pressure and tip size/angle may be necessary to obtain spray characteristics required for specific substrate configurations.

BRUSH/ROLLER

Application by these methods should be limited to small areas only such as repairs and when stripe coating. Apply evenly using a clean, well-loaded brush or roller. With this application more than one coat may be necessary to achieve the required dry film thickness.

Overcoating

Typically overcoated with epoxy primers and intermediates such as Amercoat 3905, Amercoat 4374 and Amercoat 4380. There are no maximum overcoating restrictions with these products provided the Amercoat 4371 is clean, dry and free of contamination before overcoating.

Application Data

Substrate	blasted steel/metal spray/galvanised steel		
Surface preparation.....	refer to the typical systems table for specific recommendations		
Application methods	airless spray, brush or roller		
Potlife (at 20°C/68°F)	8 hours		
Potlife and drying times are dependent on prevailing temperatures.			
Environmental conditions Amercoat 4371 should only be applied within the limits of temperature and humidity set out below.			
The surface temperature must also be at least 3°C/5°F above the dew point during application.			
Relative humidity:	up to 90%		
Surface temperature:.....	5 - 40°C	41-104°F	
Drying times (°C/°F)	5/41	10/50	20/68
Touch dry	2 hrs	45 mins	20 mins
Hard dry (hours).....	8	3	1½
Overcoating times (°C/°F)	5/41	10/50	20/68
Minimum (hours).....	16	8	4
Maximum	-	-	-

Note: All information relates to the typical dry film thickness.

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Application Procedure

1. Clean the equipment with the recommended cleaning solvent before use.
2. Stir the resin component thoroughly, then add the cure and continue mixing until the product is uniform throughout. A powerful mixer should be used. Thinning is not required.
3. For airless spray, apply a wet even coat in parallel passes. Overlap each pass by 50% to avoid bare areas, pinholes or holidays.
4. Give special attention to welds, rough spots, sharp edges and corners, rivets, bolts, etc.
5. Application at 50µm wet film thickness will normally provide 25µm dry film.
6. 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.
7. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas by spray using Amercoat 4371.
8. In confined areas ventilate with clean air during application and drying. The humidity should be maintained below 90% and the temperature such that moisture condensation will not form on the surface.
9. Clean all equipment with fresh, clean solvent immediately after use.

Before using the product, read the label on the can and consult the material safety data sheet.

Shipping Data

Packaging.....	5 and 20 litres in two part units	
resin for 20 L unit.....	16 L in 20 L can	
resin for 5 L unit.....	4 L in 5 L can	
cure for 20 L unit.....	4 L in 5 L can	
cure for 5 L unit.....	1 L in 1 L can	
Shipping weight (approx).....	20 L unit	5 L unit
resin	26 kg	6.5 kg
cure	4 kg	1 kg
Shelf life	1 year from shipment date or as indicated on label when stored indoors in unopened, original containers at 5 to 40°C (41 to 104°F).	

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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

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

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