



# Amercoat 4116

## Alkyd zinc phosphate

### Product Data/ Application Instructions

- **Single pack fast drying alkyd zinc phosphate primer**
- **EPA compliant in the UK as a single coat protective finish**
- **High build**
- **Corrosion inhibiting**
- **Quick and easy to apply**
- **Tough and durable**
- **Extensive track record**

#### Typical Uses

Shop applied single coat protective finish for general structural steelwork in dry internal environments. Also used as an anti-corrosive primer for alkyd systems, for above water service.

#### Overcoating

Can be overcoated with most single pack coatings. For further information contact your Ameron representative.

#### Mixing

Stir thoroughly before use until the product is uniform throughout.

#### Physical Data

Appearance when dry .....	low sheen		
Colour .....	red oxide, buff, off white, light grey, grey and dark grey		
Components .....	1		
Curing mechanism .....	solvent release and reaction with oxygen from the air		
Volume solids .....	58 ± 3%		
VOC .....	26% by weight / 395 g/l		
	typical	minimum	maximum
Dry film thickness (µm)	75	75	125
Wet film thickness (µm)	129	129	216
(wet film thicknesses quoted are theoretical for one airless spray coat)			
Theoretical coverage .....	7.7 m <sup>2</sup> /l (at typical dft)		
Specific gravity .....	1.53 kg/l		
Flash points			
(Closed Cup).....	°C	°F	
Amercoat 4116 .....	25	77	
Amercoat 65 .....	24	75	

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## Surface Preparation

Coating performance is, in general, proportional to the degree of surface preparation. Surfaces must firstly be thoroughly cleaned of all contaminants such as, dust, dirt, oil, grease and salts.

STEEL - Abrasive blast clean to ISO 8501-1, Sa 2½. The blast profile achieved should be in the range 50 to 100 microns but not exceeding 100 microns.

Application should occur before degradation of the surface takes place. If oxidation occurs then the steel should be re-prepared.

### MINOR REPAIR OF PREVIOUSLY COATED

**SURFACES** - Spot blast to the requirements as above. If blasting is not practicable, power tool clean the steel to ISO 8501-1 St3 standard. Care should be taken not to polish the surface. Feather back edges of sound coating.

Surfaces must be dry and free of dust, salts, grease and other contaminants immediately before coating.

## Application Methods

**AIRLESS SPRAY** - Tip size 17-19 thou' (0.43-0.48mm). Minimum pressure at the tip 2800 psi (200 kg/cm<sup>2</sup>). Adjustments to pressure and tip size/angle may be necessary to obtain spray characteristics required for specific substrate configurations.

**CONVENTIONAL SPRAY** - Thin as necessary with up to 10% by volume of the recommended thinner. Use a compressed air spray gun with 40-60 psi supply.

**BRUSH/ROLLER** - small areas only

## Application Data

Substrate ..... steel  
Application methods ..... airless and conventional spray, brush and roller  
Potlife (at 20°C/68°F) ..... not applicable

### Environmental Conditions

Amercoat 4116 should only be applied within the limits of temperature and humidity set out below.

Relative humidity ..... up to 90%  
Surface temperature ..... minimum: 5°C/41°F  
..... maximum: 40°C/104°F

The surface temperature must also be at least 3°C/5°F above dew point.

### Drying Characteristics

Temperature °C/°F	10/50	20/68	30/86
Touch dry	40 minutes	20 minutes	10 minutes
Hard dry	8 hours	4 hours	2 hours
Overcoating (minimum)	8 hours	4 hours	3 hours
Overcoating (maximum)	-	-	-

NOTE: Drying and curing times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions. Times are shorter at higher temperatures and longer at lower temperatures

Thinner ..... Amercoat 65

Cleaner ..... Amercoat 65

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## Application procedure

1. Flush equipment with recommended cleaner before use.
2. Stir the contents of the can to an even consistency with a power mixer.
3. Thinning is not normally necessary for airless spray. For conventional spray thin only as needed for workability, with up to 10% by volume of the recommended thinner.
4. Stir during application to maintain uniformity of material. For spray application apply a wet even coat in parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.
5. Double coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc.
6. Application at 129 µm wet film thickness will normally provide 75 µm dry film.
7. 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.
8. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas by spray.
9. 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.
10. Clean all equipment with recommended cleaner immediately after use or at least at the end of each working day or shift

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

## Shipping Data

Pack size .....	5 and 20 litres*
Shipping weight .....	approx. 33 kg (20 l) approx. 8.5 kg (5 l)
Shelf life .....	1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C (41 to 104°F).

\* Larger pack sizes available on request.

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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 Product Data/Application Instruction and Material Safety Data Sheet must be observed during all storage, handling, use and drying periods.

## **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-conforming 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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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.

## **Condition of Sale**

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