



Amercoat 4181

Modified vinyl primer
(formerly Colourclad Primer 3100)

Product Data / Application Instructions

- **Single pack modified vinyl primer**
- **Excellent adhesion to galvanised steel**
- **Tolerant to manually prepared rusty steel**
- **Compatible with a wide range of cladding materials**
- **Fast drying**
- **Rapid overcoating and job completion**
- **Quick and easy to apply**

Typical Uses

Anti corrosive primer for Amercoat cladding repaint systems. Suitable for use over galvanised steel, prepared rusty steel and existing PVC, PVDF, polyester and silicone polyester cladding.

Surface Preparation

All surfaces must be dry and free of dust, salts, grease and other contaminants immediately before coating. Reference should be made to the relevant product data sheets of recommended cleaning materials as detailed below.

PVC, PVDF, SILICONE POLYESTER AND POLYESTER - Thoroughly wash down with Amercoat 88 and rinse with clean, fresh water. Allow to dry completely before coating.

GALVANISED STEEL - Thoroughly clean with Amercoat 57 and rinse with clean, fresh water. Ensure surface is free of white zinc salts before coating by scrubbing/scouring the effected areas and rinsing with clean, fresh water. Allow to dry completely before coating.

RUSTY STEEL - Manually prepare to a standard conforming to ISO 8501-1 St 3.

Mixing

Stir thoroughly before use until the product is uniform throughout.

Application Methods

AIRLESS SPRAY - Use a pump of minimum ratio 30:1 capable of producing a minimum pressure at the tip of 2800 psi (200 kg/cm²). Tip size 15-17 thou' (0.38-0.43mm).

BRUSH/ROLLER - Apply evenly using a clean, well loaded brush or roller. More than one coat may be required to achieve the specified film thickness.

Physical Data

Appearance when dry	matt
Colour	medium grey, buff, red oxide, off white
Substrate	steel, galvanising, precoated cladding
Components	1
Volume solids	30 ± 2%
VOC	618 g/l
Curing mechanism.....	solvent release

	Typical minimum	maximum
Dry film thickness (µm)	40	25 60
Wet film thickness (µm)	133	83 200

(wet film thicknesses quoted are theoretical for one airless spray coat)

Theoretical coverage	7.5 m ² /l (at typical dft)
Application methods	airless spray, brush, roller
Potlife (at 20°C)	not applicable
Specific gravity.....	1.37 kg/l.
Thinner	Amercoat 920
Cleaner	Amercoat 12
Flashpoint (closed cup)	
Amercoat 4181	31°C
Amercoat 920	43°C
Amercoat 12	24°C
Pack size	5 litres
Shipping weight	approx. 8 kg
Shelf life	1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C.

Environmental Conditions

Amercoat 4181 should only be applied within the limits of temperature and humidity set out below.

Relative humidity: up to 90%
Surface temperature minimum: 2°C
maximum: 40°C

The surface temperature must also be at least 3°C above dew point

Drying Characteristics

Temperature	5°C	10°C	20°C
Touch dry	90 minutes	60 minutes	30 minutes
Hard dry	2 hours	90 minutes	45 minutes
Overcoating (minimum)	3 hours	2 hours	1 hour
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

Overcoating

Amercoat 4181 is normally overcoated with itself or Amercoat 4182. When overcoated with itself by brush or roller the minimum overcoating times will be extended to 8 hours at 20°C, 16 hours at 10°C and 24 hours at 5°C.

Application procedure

1. Flush equipment with recommended cleaner before use.
2. Stir the contents of the can to an even consistency.
3. Thinning is normally not required for airless spray.
4. Stir during application to maintain uniformity of material. When spraying, apply a wet even coat in parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.
5. Double coat all rough spots, sharp edges and corners, rivets, bolts, etc.
6. Application at 133 µm wet film thickness will normally provide 40 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.

Safety

Since improper use and handling can be hazardous to health and cause 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 to 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 nonconformance 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 for a particular purpose, shall apply. In no event shall Ameron be liable for consequential or incidental damages.

Any recommendation or suggestion relating to the use of the products made by Ameron, whether in its technical literature, or response to specific inquiry, 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 discretion 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.

Conditions of Sale

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

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.