



Amercoat 461

Moisture cured polyurethane primer

Product Data/ Application Instructions

- **Single pack moisture cured polyurethane primer**
- **Tolerant to surface moisture**
- **Suitable for cold/damp environmental conditions where other coatings cannot be applied**
- **BBA HAPAS approved**
- **Suitable for application either by brush, spray or roller**

Typical Uses

Surface tolerant maintenance primer for application in adverse weather conditions such as low temperatures and high humidities. Used as a primer in protective coating systems for general structural steel such as bridges, marine structures, petroleum processing and storage facilities, chemical and power plants and other heavy industrial facilities.

Approvals

Amercoat 461 is approved and registered to BBA HAPAS Roads and Bridges Certificate Reference 05/H116 (Highways Agency specification item 160).

Physical Data

Finish	low sheen
Colour	red oxide
Components	1
Curing mechanism	solvent release and reaction with atmospheric moisture
Volume solids :	60+/-3% (ISO 3233)
VOC	340 g/l
Dry film thickness	25-75 µm per coat
	typical minimum maximum
Dry film thickness (µm)	50 25 75
Wet film thickness (µm)	83 42 125
(wet film thicknesses quoted are typical for one airless spray coat)	
Number of coats	1
Calculated coverage	12.0 m ² /l at 50 µm
Allow for application losses, surface irregularities, etc.	
Specific gravity	1.42 kg/l
Flash points	
(Closed Cup).....	°C °F
Amercoat 461	23 73
Amercoat 65	24 75
Thinner	N/A
Cleaner	Amercoat 65



Amercoat 461

Surface preparation

STEEL: Ideally abrasive blast clean to ISO 8501-1, Sa2^{1/2}. The blast profile achieved should be within the range 35 to 75 microns but not exceeding 75 microns. Alternatively may be applied to manually prepared steel to ISO 8501-1 St 2 minimum. The surface must be free of standing water, dust, salts, grease and other contaminants immediately before coating.

Mixing

Stir thoroughly before use until the product is uniform throughout. Do not open until ready to use.

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).

BRUSH/ROLLER: Apply evenly using a clean, well-loaded brush or roller. Do not attempt to "brush-out" or "lay-off" the wet coating. Brush application is preferred over manually prepared and/or damp surfaces. Replace lids firmly to re-seal containers immediately after use. Ideally material should be used in one working shift as reaction with atmospheric moisture will reduce shelf life of the material.

Overcoating

Typically overcoated with itself or intermediate such as Amercoat 462HS.

Application Data

Substrate steel

Application methods airless spray, brush or roller

Environmental conditions

Amercoat 461 should only be applied within the limits of temperature and humidity set out below.

Relative humidity: 40 to 100%

(Can also be applied on to damp surfaces provided relative humidity does not exceed 90%. Do not apply on to surfaces visibly wet with standing water or water droplets)

Surface temperature: -5 to 40°C 23 to 104°F
(surface must be free from frost and ice)

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

Potlife (at 20°C/68°F) N/A

Drying characteristics (°C/°F)	5/41	10/50	20/68
Touch dry (hours)	4	2	1
Hard dry (hours).....	16	6	2

Overcoating/topcoating times (°C/°F)	5/41	10/50	20/68
Minimum - with itself (hours)	16	8	4
Minimum - with epoxies (hours)	24	24	16
Maximum (days)	14*	10*	7*

* Maximum overcoating times are 7 days at 20°C/68°F with urethane or epoxy. With other materials this maximum will be less for example at 20°C/68°F it will drop typically to 3 days. If these intervals are exceeded surface must be abraded prior to overcoating.

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

Induction time (at 20°C/68°F) not applicable

Thinner N/A

Cleaner Amercoat 65

Amercoat 461

Application procedure

1. Clean the equipment with the recommended cleaning solvent before use.
2. Stir thoroughly and continue mixing until the product is uniform throughout. 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 85µm wet film thickness will normally provide 50µm 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 either by spray, brush or roller using Amercoat 461.
8. In confined areas ventilate with clean air during application and drying.
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 litres
Shipping weight (approx).....	7.5 kg
Shelf life	6 months from shipment date or as indicated on label when stored indoors in unopened, original containers at 5 to 40°C (41-104°F).

Amercoat 461

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.

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