



# Amercoat 462HS

## Moisture cured polyurethane MIO

### Product Data/ Application Instructions

- **Single pack moisture cured polyurethane MIO coating**
- **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

Amercoat 462HS is a single pack moisture cured high build MIO polyurethane intermediate/functional finish coating for application in adverse weather conditions such as low temperatures and high humidities. Used 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 462 HS is approved and registered to BBA HAPAS Roads and Bridges Certificate Reference 05/H116 (Highways Agency specification item 162).

#### Physical Data

Finish .....	low sheen, metallic sparkle or lustre		
Colour .....	Medium grey, natural grey		
Components .....	1		
Curing mechanism .....	solvent release and reaction with atmospheric moisture		
Volume solids : .....	58+/-3% (ISO 3233)		
VOC .....	365 g/l		
Dry film thickness .....	50-100 µm per coat		
	typical	minimum	maximum
Dry film thickness (µm)	75	50	125
Wet film thickness (µm)	129	86	216
(wet film thicknesses quoted are typical for one airless spray coat)			
Number of coats .....	1		
Calculated coverage .....	7.7 m <sup>2</sup> /l at 75 µm		
Allow for application losses, surface irregularities, etc.			
Specific gravity .....	1.54 kg/l		
Flash points			
(Closed Cup).....	°C	°F	
Amercoat 462 HS .....	28	82	
Amercoat 65 .....	24	75	
Thinner .....	N/A		
Cleaner .....	Amercoat 65		



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## Surface preparation

STEEL - Normally applied over Amercoat 461 primer. The substrate should be prepared in accordance with the product data instructions of the primer being used. The surface must be dry and free of dust, salts, grease and other contaminants immediately before coating.

PREVIOUSLY COATED SURFACES - Loose and flaking coatings should be removed and feathered back to a firm edge. Remaining glossy coatings such as epoxy and polyurethane should be abraded and degreased prior to application. A test area is advised to ensure no reaction with the existing coating.

In all cases the surfaces 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/cm<sup>2</sup>). Tip size range 17-19 thou (0.43-0.48mm)..

BRUSH/ROLLER: Apply evenly using a clean, well-loaded brush or roller. Do not attempt to "brush-out" or "lay-off" the wet coating. 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 Amercoat 450S or Steelguard 3392.

## Application Data

Substrate ..... primed steel  
Application methods ..... airless spray, brush or roller

Environmental conditions  
Amercoat 462 HS 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 - 40°C      23 - 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).....	12	8	2

Recoating/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

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## 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 130µm wet film thickness will normally provide 75µm 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 462 HS.
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).....	8 kg
Shelf life .....	6 months 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.

## **Condition of Sale**

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