

AQUABOND AC500 PRIMER

PRODUCT DESCRIPTION

A water based air drying coating based on a modified acrylic resin, formulated for use as a dip or spray applied one coat anticorrosive primer/finish over suitably prepared cast iron and steel components. This system will provide 500 hours continuous salt spray under ASTM B117 at 50 μ DFT.

USES

Designed for use as a primer/finish onto cast iron and steel substrates. Aquabond AC500 can be overcoated with Aquabond HP10 or Aquabond HP15, and a variety of 2K solvented systems.

TECHNICAL PROPERTIES

Colour	Black		
Finish	Matt		
Curing Agent	n/a		
Mix Ratio	n/a		
Specific Gravity	1.2		
Volume Solids	30%		
Recommended Film Thickness	80-160 μ m WFT / 25-50 μ m DFT		
Theoretical Spreading Rate	6 – 12 m ² /litre		
Application Method	Spray, Dip		
Flash Point	> 40°C		
VOC	25 g/litre		
Drying Times*	10°C	20°C	30°C
Touch Dry	40 minutes	20 minutes	10 minutes
Hard Dry	1 hour	40 minutes	30 minutes
Minimum Overcoat	4 hours	2 hours	1 ½ hours
Maximum Overcoat	Indefinite	Indefinite	Indefinite

* This product can be force dried – typical schedule is allow 5-10 minutes flash off, then 5-10 minutes at 40-70°C. It is not recommended for prolonged exposure above 80°C.

CERTIFICATION/APPROVALS Arvin Meritor 116/91

RECOMMENDED SYSTEMS Aquabond HP10, Aquabond HP15

SURFACE PREPARATION

Surfaces to be painted should be clean, dry and free of any oil or grease. Ideally components should be freshly shot/grit blasted and should be free from any corrosion before painting commences.

PRODUCT APPLICATION

Mixing	Stir thoroughly before use.
Thinners	De-Ionised or Soft Water.
Dip Application	Thinning ratio should be determined by use, but as a rough guide somewhere between 10-25% should give required finish. Avoid the use of hard water. The dip tank and pipe work should be fabricated from suitable corrosion resistant materials. Aquabond AC500 Primer, at application viscosity, should be kept agitated by circulating in a weir equipped dip tank. Circulation should be carried out using a suitable low shear pump such as diaphragm or peristaltic. High shear pumps must not be used.
Conventional Spray	Use as supplied. Typical 50-60 psi pressure and 1.4-1.8 mm diameter nozzle.
Airless Spray	Use as supplied. Typical 0.38-0.53 mm, 65-80° angle and 1800-2000 psi pressure.
Air Assisted Airless Spray	Use as supplied. Use 30-40 psi pressure and 1.2-1.8 mm diameter nozzle.
Cleaner	Water
Cleanup Considerations	All equipment should be cleaned immediately after use with water. It is advisable that equipment should be cleaned/flushed during the course of application, the frequency of which will depend on the volume of material used and timescale over which applied. Ensure all waste materials (including packaging) are disposed of in accordance with local regulations.

HEALTH, SAFETY & ENVIRONMENTAL

This product must be used in accordance with the Material Safety Data Sheet supplied by Spencer Coatings Limited.
The user must observe local health, safety and environmental regulations when using this product.
Consult Spencer Coatings Limited if there are any concerns over the suitability of this product.

PACK SIZES

10 litre, 200 litre drum, 1000 litre IBC

PACK WEIGHTS

10 litre: 12 kg.
200 litre : 240 kg.
1000 litre : 1200 kg.

STORAGE CONDITIONS

Store away from extremes of temperature. A shelf life of 6 months should be expected.

PROTECT FROM FROST AND STORE ABOVE 5°C. ENSURE STRICT STOCK ROTATION IS PRACTISED.

LIMITATIONS

Do not apply when RH exceeds 88% or the surface is less than 2°C above dew point.

USE ONLY AS A PRIMER/FINISH WHEN SYSTEM IS TO BE EXPOSED TO EXTREME TROPICAL CONDITIONS

NOT RECOMMENDED FOR PROLONGED EXPOSURE OVER 80C

TEST RESULTS

Adhesion BS3900 E6 (1mm Cross-Hatch)	>95%
Scratch Resistance	>H
Flexibility BS3900 E1	4mm Mandrel pass
Solvent Resistance Drop Test	
Unleaded Gasoline	Pass
White Spirit	Pass
Diesel Immersion (24 hours @ 20°C)	Pass
Salt Spray Resistance ASTM B117 (500 hours)	Pass
Overcoating Test**	
1K Polyurethane	No reaction. No loss of gloss. Adhesion > 99%
1K QAD Alkyd	No reaction. No loss of gloss. Adhesion > 99%
2K Epoxy	No reaction. No loss of gloss. Adhesion > 99%
2K Acrylic Urethane	No reaction. No loss of gloss. Adhesion > 99%

** Test samples of AC500 were cured for 7 days prior to overcoating with selected topcoat.

DISCLAIMER

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It is the user's responsibility to ensure that this sheet is current prior to using the product.