

MILCOAT® Aircraft PU - UV Block

Solvent based flexible polyurethane primer / finish with POLYFAST® technology

A two pack, solvent based, aliphatic, high solids, flexible polyester modified polyurethane coating, highly adhesion promoted, zinc phosphate pigmented and is extremely UV and weather resistant. With excellent sealing and anti-blocking properties.

Polyfast technology provides outstanding curing speeds while at the same time allowing pot life's exceeding 2 - 4 hours. This coating cures quickly at ambient temperatures and can also be baked at up to 80 degrees Celsius for 30 minutes for a fully cured coating. It has incredible depth of gloss and an ultra-smooth surface appearance. The dried film has a high slip surface.

Properties:

- Fast Drying.
- Excellent sealing properties.
- Anti-Blocking properties.
- Anti-corrosive properties.
- Provides improved adhesion for subsequent coatings
- Excellent obliteration/coverage.
- Non-chalking & non-yellowing.
- Excellent flexibility and durability.
- Resistant to mild chemicals, salt water, mineral and vegetable oils, paraffin's, aliphatic solvent, dilute industrial chemicals & aqueous solutions.

Technical Data:

Colour	Full Tintometric System (+15,000 colours) and Aluminium
Finish	Glossy Finish
Density	1.25 Kg/ Litre
Volume Solids	70%
Mix Ratio (Volume)	4 : 1 (A : B)
Typical Film Thickness	60 – 80µm DFT per coat (90 – 120µm WFT per coat)
Theoretical Coverage	9 – 11 m ² / Litre, per coat
Method of Application	Airless spray, conventional spray, brush, or roller
Activator	PU Activator 90 AL XL
Solvent	Solvent XL or PU Thinner
Pot Life after mixing @ 25°C	2 – 4 Hours

Drying Information:

	0°C	5°C	10°C	25°C	30°C	40°C
Touch Dry	-	-	-	1 hr	-	-
Hard Dry	-	-	-	6 hrs	-	-
Light Traffic 24 Hours						
Overcoating Data – See Limitations						
Substrate Temp.	0°C	5°C	10°C	25°C	30°C	40°C
Minimum	-	16 hrs	8 hrs	3 hrs	-	-
Maximum	Extended					
Cure Time	-	15 days	10 days	7 days	4 days	-

Note: Drying and overcoating times quoted are measured at 50µm DFT, at higher film thicknesses times will be increased.

*See limitations.

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Whilst we endeavour to ensure that all advice we give about the product is correct, the information given in this data sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so entirely at his own risk. As conditions of use, method of application and suitability of the substrate prior to painting are beyond our control, no guarantee is implied by the recommendations contained herein. We therefore do not accept any liability whatsoever or howsoever arising from the performance of this product or for any loss or damage arising out of the use of this product. The information contained in this sheet is liable to modification from time to time in the light of experience and ongoing product development programmes. It is the user's responsibility to ensure that this sheet is current prior to using the product

Latest Update:
18/04/2024
Issue Date:
17/04/2024

Surface Preparation:

The performance of this product will depend upon the degree of surface preparation. The surface to be coated must be cleaned and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000.

Accumulated dirt and soluble salts must be removed. Dry bristle brushing will normally be adequate for accumulated dirt. Soluble salts should be removed by freshwater rinsing. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Mild Steel

Product should be applied to surfaces prepared by abrasive blast cleaning to SA 2½ in accordance with International Standard ISO 8501:2007 and SSPC-SP6 or Hand / Power tool clean to a minimum of St2 (ISO 8501-1:2007) or SSPC-SP2.

Primed Surfaces

MILCOAT Aircraft PU – UV Block should always be applied over a suitable priming/anti-corrosive system. The primed substrate should be dry and free from any contamination and MILCOAT Aircraft PU – UV Block must be applied within the coating intervals specified in the relevant product data sheet.

Damaged or broken-down areas where the substrate has been exposed must be prepared to the specified standard (e.g. SSPC-SP6 or Sa2½ (ISO 8501-1:2007), Abrasive blasting, or SSPC-SP11, Power Tool Cleaning) and primed prior to the application of MILCOAT Aircraft PU – UV Block.

Application:

Mixing	Material is supplied in two containers as a kit. Always mix a complete kit in the quantities supplied. Once mixed the product should be used within the pot life specified. Stir the base component well with a flat-bottomed paddle or mechanical mixer until product is uniform. Continue stirring and add the entire contents of the activator container. Continue stirring until the mixture is homogeneous. Ensure that sufficient material be mixed so that the product can be applied within its use-able life. The temperature of the mixed product should preferably be above 10°C, otherwise extra solvent may be required to obtain application viscosity. Too much solvent results in reduced sag resistance, thinner should be added after mixing both components.		
Mix Ratio	4 part(s) base : 1 part(s) PU Activator 90 AL XL by volume		
Pot Life	2 - 4 hours @ 25°C		
Airless Spray	Recommended	Tip range 11 – 17 Thou. Pressure at the tip should not be less than 140 bar (2000 PSI).	
Air Spray (Pressure Pot)	Recommended	Gun	Pressure Feed
		Fluid Tip	1.1mm to 1.6mm
Air Spray (Conventional)	Recommended	Gun	Gravity Feed
		Fluid Tip	1.1mm to 1.6mm
Brush/Roller	Suitable	Typically, 40 – 50µm can be achieved	
Thinner	Solvent XL or PU Thinner	0 – 20% depending on application method	
Work Stoppage	Do not allow material to remain in spray equipment after use, thoroughly flush and clean all equipment with SA65 Thinner . Once the kit has been mixed, they should not be re-sealed and it is advised that of prolonged stoppages, work recommences with freshly mixed units		

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Clean Up	Clean all equipment immediately after use with SA65 Thinner . It is advisable to periodically flush out spraying equipment during the course of the working day. Frequency of cleaning is dependant of upon the amount sprayed, temperature and elapsed time. Work strictly in accordance with the specified pot life of the material.
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Environment:

	Surface Temperature	Ambient Temperature	Relative Humidity
Minimum	5°C*	10°C	No lower limit
Maximum	40°C	45°C	85%

* Or 3°C above dew point

Limitations:

- This product is not suitable for immersion conditions.
- For brush and roller application and for corrosive environments, a coat of primer is required.
- To give uniform coverage especially when applying MILCOAT Aircraft PU – UV Block over dark colours, the best practice is to choose a primer or intermediate coat with a compatible colour.
- Low temperature, high relative humidity and condensation occurring during or immediately after application may result in a matt finish and inferior film.
- Premature exposure to water will cause colour change, especially in dark colours and at low temperatures.
- Overcoating information is given for guidance only and is subject to local climate and environmental conditions. Consult a Specialized Coating Systems representative for specific recommendations.
- Apply in good weather. Temperature of the surface to be coated must be at least 3°C above the dew point. For best results bring the material temperature between 20 – 30°C, unless specifically instructed otherwise, prior to mixing with and application.
- Unmixed material (in closed containers) should be maintained in protected storage in accordance with information given in the STORAGE section of this data sheet.
- Technical and application data herein is for the purpose of establishing a general guideline of the coating application procedures.
- Test performance results were obtained in a controlled laboratory environment and Specialized Coating Systems makes no claim that the exhibited published test results, or any other tests, accurately represent results found in all field environments. As application, environmental and design factors can vary, due care should be exercised in the selection and verification of the performance and use of the coating.
- Overcoating aged finishes/topcoats; although no maximum overcoating time is given in the data sheet, certain precautions must be taken prior to overcoating. Slight chalking will have occurred due to UV exposure and the surface will have been exposed to pollutants in the atmosphere. These surface contaminants must first be removed by washing with Hydrosolve and light abrasion using Scotchbrite pads followed by rinsing with drinking quality water.

Pack Size:

5 & 20 Litre.

Storage:

- Shelf Life:
 - Part A: 24 months minimum at 25°C from date of manufacture. Subject to inspection thereafter.
 - Part B: 12 months minimum at 25°C from date of manufacture. Subject to inspection thereafter.
- Store in dry conditions out of direct sunlight, away from sources of heat or ignition.

Precautions:

For complete safety and handling information please refer to the appropriate Safety Data Sheets prior to using this product.

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