



# Imron® AF3500™ Polyurethane Topcoat (EJ Quality)



## GENERAL

### DESCRIPTION

A 3.5 VOC compliant (VOC<420g/L), polyurethane topcoat intended for use on jet aircraft. This high performance topcoat is designed to deliver premium appearance and durability. It is available in factory packaged whites and mixed solid colors.

### RECOMMENDED USES

Imron® AF3500™ is recommended for jet aircraft and similar general aviation applications where exceptional appearance, long-term fluid resistance, and outstanding durability are required. Imron® AF3500™ is recommended for use with:

Primers	Corlar® 13550S™, Corlar® 13580S™
Surfacers	Corlar® 13580S™
Basecoat/Clearcoat	Imron® AF700™, Imron® AF740™

The products referenced herein may not be sold in your market. Please consult your distributor for product availability.



## MIXING

### COMPONENTS

Imron® AF3500™ factory packaged or mixed colour (EJ Quality)

13110S™ Activator

13100S™ Activator (Small Parts/Repair)

Imron® 13865S™ Fast Pot-Life Extender

Imron® 13875S™ Medium Pot-Life Extender

13765S™ Fast VOC-Exempt Reducer

13775S™ Medium VOC-Exempt Reducer

Imron® pot-life extenders and VOC-exempt reducers are available for a range of application conditions. Suggested usage ranges are dependent on air flow and relative humidity.

	21°C	27°C	32°C	38°C
Riveted Aircraft	13865S™ 13765S™	13865S™ 13765S™	13875S™ 13765S™	13885S™ 13775S™
Flush-Surface Aircraft	13865S™ 13765S™	13875S™ 13765S™	13885S™ 13775S™	13895S™ 13785S™

### MIX RATIO

Thoroughly mix Imron® AF3500™ color prior to activation. Filter activated material prior to spray application.

<u>Components</u>	<u>Regular Parts by Volume</u>	<u>Small Parts/Repair Parts by Volume</u>
Imron® AF3500™ Colour (EJ Quality)	2	2
13110S™ / 13100S™ Activator	1 (13110S™)	1 (13100S™)
Imron® 138X5S™ Pot-Life Extender	0.25	0.25
137X5S™ Reducer	0.25	0.25



### VISCOSITY

15-20 seconds in a Zahn #2 cup @21°C.

Listed ranges were established using GARDCO EZ Zahn (ASTM) Cups, measurements using other Zahn type cups may provide different results.

### INDUCTION TIME

No induction time is required prior to application.

### POT LIFE

8 hours at 21°C

### ADDITIVES

#### Accelerator

- Add up to 15 g 389S™ per RTS litre
- Add up to 8 g 8989S™ per RTS litre for spot work only

#### Anti-Crater

- Add up to 8 g 13813S™ per RTS litre
- Do not use FEE

### REDUCED GLOSS

Flattening of Imron® AF3500™ is not recommended for exterior use, as fluid resistance is compromised.



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## APPLICATION

### SUBSTRATES AND SURFACE PREPARATION

Surface preparation is critical to topcoat appearance. Primers and surfacers should be properly applied and cured according to product recommendations. Surfaced substrate should be DA sanded with P400-grit or finer for best appearance. Substrate should always be thoroughly wiped/tacked immediately prior to topcoat application.

### ENVIRONMENTAL CONDITIONS

Substrate and ambient temperature must be between 10°C and 45°C. The substrate must be at least 3°C above the dew point. Relative humidity should be below 90%.

Heating activated material above 45°C may cause gelation. For optimum appearance spray Imron® AF3500™ at 24°C or warmer.

### GUN SETUP

Imron AF3500 can be applied with conventional, HVLP, air-assisted airless and electrostatic spray equipment using pressure or gravity fluid delivery.

#### Conventional Fluid Tip

Pressure Pot	1.2 mm-1.6 mm
Gravity Feed	1.4 mm-1.6 mm

#### HVLP

Pressure Pot	1.0 mm-1.4 mm
Gravity Feed	1.2 mm-1.6 mm

### FLUID DELIVERY

Conventional	300-355 mL/minute
HVLP	300-355 mL/minute

### AIR PRESSURE

Conventional	3.4-4.1 bar atomizing air
HVLP	1.7-2.1 bar atomizing air



**APPLICATION**

Spray a medium-wet first coat. Allow first coat to flash for 30-45 minutes and tack-up prior to second coat. Apply second coat as a wet cross-coat to achieve 50-65 µm dry film build.

**CLEANUP SOLVENT**

Duxone® 1K Multi Acrylic Thinner



**DRY TIMES**

**AIR DRY**

At 21°C  
 Dry to Touch 12 hours  
 Dry to Tape 24 hours

**FORCE DRY**

At 55°C  
 Flash Before Force Dry 3 hours  
 Dry to Touch 6 hours  
 Dry to Tape 10 hours

**RECOAT**

When recoating Imron AF3500 with itself, Imron AF700 basecoat/ Imron AF740 clearcoat for stripes, or Imron AF400 topcoat for stripes, scuff sanding is required if the topcoat has air dried for more than 36 hours or if the topcoat has been force dried.



**PHYSICAL PROPERTIES**

<b>VOC</b>	Less Exempts (LE)	As Packaged (AP)
Imron® AF3500™	432 g/L	432 g/L
RTS Imron® AF3500™	420 g/L	384 g/L

**MIXED COLORS**

Colour	Whites and solid colours
Closed Cup Flash Point	7°C-23°C
Shelf Life	1 year

**READY-TO-SPRAY\* (WILL VARY WITH COLOUR)**

Theoretical Coverage	7.2 m <sup>2</sup> /L average at 65 µm dry film thickness (7.1-7.3 m <sup>2</sup> /L)
Weight Solids	60% average (55-64%)
Volume Solids	49% average (48-50%)
Specific Gravity	1.23 g/mL average (1.01-1.24 g/mL)

\*Using Imron® 13875S™ Pot-Life Extender and 13765S™ VOC-Exempt Reducer

**DRY FILM**

Gloss	≥ 90 measured at 60°
Recommended Film Thickness	50-65 µm

**COATING PERFORMANCE**

Skydrol Resistance	Excellent
Chemical and Solvent Resistance	Excellent
Weatherability	Excellent
Humidity Resistance	Excellent
Acid and Alkali Resistance	Excellent
Abrasion Resistance	Excellent
Flexibility	Excellent



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## VOC REGULATED AREAS

These directions refer to the use of products which may be restricted or require special mixing instructions in VOC regulated areas. Follow mixing usage and recommendations in the VOC Compliant Products Chart for your area.

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## SAFETY AND HANDLING

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and SDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without an approved air purifying respirator with particulate filters complying with AS/NZS 1716:2012 and gloves.