



# Imron® AF400™ Polyurethane Topcoat (EP Quality)



## GENERAL

### DESCRIPTION

A VOC compliant (VOC<420 g/L), high solids, polyurethane topcoat designed to deliver high performance, excellent appearance and durability for propeller and rotary aircraft. It is available in factory-packaged whites and mixed colors.

### RECOMMENDED USES

Imron® AF400™ is recommended for riveted aircraft and similar general aviation applications where excellent appearance, durability, sag resistance, and ease of use are required. Imron® AF400™ is ideal for air dry applications where forced drying (bake) is not available, and offers activator options for optimum performance in both accent stripe and overall body color applications. Imron® AF400™ is recommended for use with:

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

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



## MIXING

### COMPONENTS

Imron® AF400™ Colour (EP Quality)  
13100S™ Activator (For Effect Colours, Stripes, Small Parts and Repairs)  
13110S™ Activator (For Overall Body Solid Colours)

### MIX RATIO

Thoroughly mix Imron® AF400™ colour prior to activation. Filter activated material prior to application.

<u>Component</u>	<u>Parts by Volume</u>
Imron® AF400™ Colour (EP Quality)	3
13100S™ / 13110S™ Activator	1

13100S™ is recommended for small parts and repairs.

### VISCOSITY

11-16 seconds in a Zahn #3 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

2 hours at 21°C with 389S™  
45 minutes at 21°C with 8989S™



**ADDITIVES (OPTIONAL)**

**Accelerator**

- Add up to 15 g 389S™ per RTS litre to improve dry time
- Add up to 8 g 8989S™ per RTS litre for fast dry; limited area work

**Anti-crater (solid colors)**

- Add up to 8 g 13813S™ per RTS litre

**Reducers**

- 13775S™ Medium VOC Exempt Reducer
- 13765S™ Fast VOC Exempt Reducer

**For Reduced Gloss**

- Use PT196™ Flattener

Components	Satin Parts by Volume	Semi-Gloss Parts by Volume
Axalta™ Imron® AF400™ Topcoat)	1.5	2.0
Axalta PT196™ Flattener	1.5	1.0
Axalta 13100S™ Urethane Activator	1.0	1.0

\*Gloss ranges are an approximate. Gloss level may vary due to application method and film thickness, reduction, reducer used and environmental conditions. Please refer to the technical datasheet for Imron® PT196™ Flattening of Imron® AF400™.

\*Flattening of Imron® AF400™ is recommended only for interior use.

Adding 15 g 389S™ per RTS litre is recommended for most all applications in order to provide longer pot life.



**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 P320-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® AF400™ at 24°C or warmer.

**GUN SETUP**

Imron® AF400™ can be applied with conventional, HVLP, air-assisted airless, and electrostatic spray equipment using pressure or gravity fluid delivery.

**Conventional Fluid Tip**

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

**HVLP**

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

**FLUID DELIVERY**

Conventional	240-300 mL/minute
HVLP	240-300 mL/minute

**AIR PRESSURE**



Conventional	3.4-4.1 bar
HVLP	1.7-2.1 bar

**APPLICATION**

- Spray a medium wet first coat followed by a second medium wet second coat after a 30 second to 5 minute flash time to achieve 50-65 µm dry film build.
- Effect colors should be applied using 13100S™ activator utilizing the same technique as above with the option of a control coat applied 25-30 cm from substrate immediately following the second medium wet coat to minimize mottling or tiger stripping.

**CLEANUP SOLVENT**

Duxone® 1K Multi Acrylic Thinner



**DRY TIMES**

**AIR DRY**

At 21°C with 15 g 389S™ per ready-to-spray litre

Dry to Touch	2-3 hours
Dry to Tape	4-7 hours

**FORCE DRY**

At 55°C with 15 g 389S™ per ready-to-spray litre

Flash Before Force Dry	15 minutes
Dry to Touch	1-2 hours
Dry to Tape	3-4 hours

**RECOAT**

When recoating Imron® AF400™ with itself or Imron® AF700™ basecoat/clearcoat for stripes, scuff sanding is required if the topcoat has air dried for more than 48 hours or 24 hours if the topcoat has been force dried or accelerated with 8989S™.



**PHYSICAL PROPERTIES**

**VOC**

	Less Exempts (LE)	As Packaged (AP)
Imron® AF400™	456 g/L	432 g/L
RTS Imron® AF400™	408 g/L	384 g/L

**FACTORY-PACKAGED AND MIXED COLORS**

Color (EP quality custom color mixes)	Solid and metallic colors
Closed Cup Flash Point	7°C-23°C
Shelf Life	Mixed Colors – 1 year Reduced Gloss – 6 months

**READY-TO-SPRAY\***

Theoretical Coverage	898.0 m <sup>2</sup> /L average at 65 µm dry film thickness	(7.7-8.2 m <sup>2</sup> /L)
Weight Solids	63% average (57-68%)	
Volume Solids	53% average (49-52%)	
Specific Gravity	1.10 g/mL average (1.00-1.30 g/mL)	

**DRY FILM**

Gloss	≥90 measured at 60°
Optional Reduced Gloss*	0-10 Flat, 25-45 Satin at 60 degree angle
Recommended Film Thickness	50-65 µm

\*Contact your Axalta representative for availability.

**COATING PERFORMANCE**



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.