



# Imron® AF400™ Polyurethane Topcoat (EP Quality)



## GENERAL

### DESCRIPTION

A 3.5 VOC compliant, 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™



## MIXING

### COMPONENTS

Imron AF400 Color (EP Quality)  
13100S™ Activator (For Effect Colors, Stripes, and Repairs)  
13110S™ Activator (For Overall Body Solid Colors)

### MIX RATIO

Thoroughly mix Imron AF400 color prior to activation. Filter activated material prior to application.

Component	Parts by Volume
Imron AF400 Color (EP Quality)	3
13100S / 13110S Activator	1

13100S is recommended for small parts and repairs.

### VISCOSITY

11-16 seconds in a Zahn #3 cup.  
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 70°F (21°C) with 13801S™ or 13803S™  
45 minutes at 75°F (24°C) with 13808S™

### ADDITIVES (OPTIONAL)

#### Accelerator

- Add up to 2 oz. 13801S per RTS gallon to improve pot life/dry time
- Add up to 2 oz. 13803S per RTS gallon to improve dry time
- Add up to 1 oz. 13808S per RTS gallon for fast dry; limited area work



**Anti-crater (solid colors)**

- Add up to 1 oz. 13813S per RTS gallon

**For Reduced Gloss**

- Use PT196™ Flattener

Adding 2 oz. 13801S or 13803S per RTS gallon is recommended for most all applications in order to provide longer pot life.

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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 280-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 50°F (10°C) and 110°F (43°C). The substrate must be at least 5°F (3°C) above the dew point. Relative humidity should be below 90%. Heating activated material above 110°F (43°C) may cause gelation. For optimum appearance spray Imron AF400 at 75°F (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	1.0mm-1.4mm (.039”-.055”)
Gravity Feed	1.2 mm-1.6 mm (.047”-.063”)

**HVLP**

Pressure Pot	1.0 mm-1.4 mm (.039”-.055”)
Gravity Feed	1.2 mm-1.6 mm (.047”-.063”)

**FLUID DELIVERY**

Conventional	8-10 oz./minute
HVLP	8-10 oz./minute

**AIR PRESSURE**

Conventional	50-60 psi atomizing air
HVLP	25-30 psi atomizing air

**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 2.0-2.5 mils 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 10-12 inches from substrate immediately following the second medium wet coat to minimize mottling or tiger stripping.

**CLEANUP SOLVENTS**

- Axalta 107™ Low VOC Gun & Equipment Cleaner
- Axalta 105™ Gun & Equipment Cleaner



## DRY TIMES

### AIR DRY

At 70°F (21°C) with 2 oz 13803S per ready-to-spray gallon  
 Dry to Touch 2-3 hours  
 Dry to Tape 4-7 hours

### FORCE DRY

At 130°F (54°C) with 2 oz 13803S per ready-to-spray gallon  
 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 13808S .



## PHYSICAL PROPERTIES

### VOC

	Less Exempts (LE)	As Packaged (AP)
Imron AF400	3.8 lbs./gal	3.6 lbs./gal
RTS Imron AF400	3.4 lbs./gal	3.2 lbs./gal

### FACTORY-PACKAGED AND MIXED COLORS

Color (EP quality custom color mixes)	Solid and metallic colors
Closed Cup Flash Point	20°F-73°F
Shelf Life	Fac Pac - 2 years (Unopened at 50°-110°F) Mixed Colors – 1 year Reduced Gloss – 6 months

### READY-TO-SPRAY\*

Theoretical Coverage	850 ft <sup>2</sup> /gal average at 1 mil dry film thickness (820-870 ft <sup>2</sup> /gal)
Weight Solids	63% average (57-68%)
Volume Solids	53% average (49-52%)
Gallon Weight	9.2 lbs./gal average (8.3-10.8 lbs./gal)

### DRY FILM

Gloss	≥90 measured at 60°
Optional Reduced Gloss*	0-10 Flat, 25-45 Satin at 60 degree angle
Recommended Film Thickness	2.0-2.5 mils

\*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

## 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 MSDS 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 a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

**Revised: November 2015**

In the United States:  
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In Canada:  
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