



Imron® AF700™ Polyurethane Basecoat (ES Quality)



GENERAL

DESCRIPTION

A VOC compliant (VOC<420g/L), high solids, high-performance polyurethane basecoat designed for aviation/aerospace applications. It is formulated to deliver excellent appearance and durability and is available in solid, metallic-effect, and pearl-effect mixed colours.

RECOMMENDED USES

Imron® AF700™ is a versatile system recommended for aviation/aerospace applications where premium colour is essential in achieving designs—whether simple or complex; conservative or bold, from accent stripes, split bases, overalls, rotary wing, jets or single engines, Imron® AF700™ covers them all. Imron® AF700™ must be clearcoated to provide proper appearance and coating performance. Imron® AF700™ is recommended for use with:

Primers/ Surfacer
Basecoat/Clearcoat
Topcoats

Corlar® 13550S™, Corlar® 13580S™
Imron® AF700™, Imron® AF740™
Imron® AF400™, Imron® AF3500™

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



MIXING

COMPONENTS

Imron® AF700™ Basecoat (ES Quality)
13100S™ Urethane Activator
13765S™ Fast Reducer
13775S™ Medium Reducer

Refer to Imron® AF740™ product data sheets for clearcoat information.

MIX RATIO

Thoroughly mix Imron® AF700™ prior to activation. Filter activated material prior to spraying.

Components

Imron® AF700™ Basecoat (ES Quality)
13100S™ Urethane Activator
13765S™ or 13775S™ Reducers

Parts by Volume

3
1
up to 20%*

*Add Reducer to achieve recommended viscosity

VISCOSITY

10-18 seconds in a Zahn #3 cup @21°C (Listed ranges were established using GARDCO EZ Zahn (AS) 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 24°C with 8989S™



ADDITIVES (OPTIONAL)

To improve dry time

- Add up to 15 g 389S™ per RTS litre

For fast dry, limited area work

- Add up to 8 g 8989S™ per RTS litre

Anti-crater (solid colors)

- Add up to 8g 13813S™ per RTS litre

Adding 15 g of 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 substrates should be DA sanded with 400-grit or finer for best appearance. Substrate should always be thoroughly wiped and 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® AF700™ at 24°C or warmer.

GUN SETUP

Imron® AF700™ 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-1.6 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

- Accelerator aids in dry to tape.
- Solid colors – apply either a cross coat or two medium coats.
- Effect – medium first coat. If complete hiding is not achieved, follow with a second medium coat. Apply 45° orientation coat as necessary.

CLEANUP SOLVENT

Duxone® Gun Wash Solvent



DRY TIMES

AIR DRY

21°C with 15 g 389S™ per ready-to-spray litre
Dry to Touch 3-4 hours
Dry to Tape 6-7 hours

FORCE DRY

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

Air Dry at 21°C Scuff Sand required after 48 hours.
Force Dry at 55°C Scuff Sand required after 20 hours

With 15 g 8989S™ accelerator per ready-to-spray litre, Scuff sand required after 12 hours.



PHYSICAL PROPERTIES

	Less Exempts (LE)	As Packaged (AP)
VOC		
Imron® AF700™	456 g/L	432 g/L
RTS Imron® AF700™ Mixed 3:1 with 13100S	408 g/L	384 g/L

MIXED COLORS

Color	Solid and metallic colors
Closed Cup Flash Point	7°C-23°C
Shelf Life	1 year mixed colors (Unopened at 10°-45°C)

READY-TO-SPRAY*

Theoretical Coverage	13.1 m ² /L average at 40 µm dry film thickness (12.6-13.4 m ² /L.)
Weight Solids	63% average (58-68%)
Volume Solids	53% average (51-56%)
Specific Gravity	1.10 g/mL average (1.00-1.30 g/mL)

DRY FILM

Gloss	≥90 measured at 60°
Recommended Film Thickness	25-40 µm

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.



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.