

DuPont™ Imron® AF740™

Polyurethane Clearcoat – Skydrol Resistant

Type

DuPont™ Imron® AF740™ is a high-performance polyurethane clearcoat.

Description

Imron® AF740™ is a clear polyurethane coating resistant to Skydrol and designed to deliver excellent appearance, durability, and robust application as part of the Imron® AF700™ Basecoat/Clearcoat system. Imron® AF740™ is formulated to provide balanced performance including smooth appearance, resistance to sag, and productive dry times. This high-solids clearcoat has a ready-to-spray VOC of less than 3.5 lbs/gal.

Recommended Uses

Imron® AF740™ is recommended for use with Imron® AF700™ Basecoat in applications where either Skydrol resistance or the smoothest possible appearance (minimal orange peel) is required. Imron® AF740™ is ideal for accent stripes on business jets and single-engine aircraft.

Imron® AF740™ is recommended for use as part of the Imron® AF700™ Basecoat/Clearcoat system.

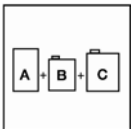
General Information for Use



Components

DuPont™ Imron® AF740™ Polyurethane Clearcoat
DuPont™ 13110S™ Urethane Activator
DuPont™ 13930S™ Reducer
DuPont™ 13895S™ Pot Life Extender

See Imron® AF700™ product data sheet for basecoat information.



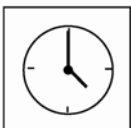
Mix Ratio

Thoroughly mix Imron® AF740™ prior to activation. Filter activated material prior to spray application.

Three Component System	Parts by Volume	
DuPont™ Imron® AF740™ Polyurethane Clearcoat	3	
DuPont™ 13110S™ Urethane Activator	2	
DuPont™ 13930S™ Reducer (optional)	0.5	(optional)

For hot weather, 13895S™ may be used in place of 13930S™ for improved application and appearance.

Viscosity will be 10 - 13 seconds in a Zahn #3 cup.



Pot Life and Induction Time

Pot life is 2 hours at 70°F (21°C) (with 2 oz of DuPont 13803S™ per ready-to-spray gallon).
No induction time is required prior to application.



Aviation Finishes

Additives

Accelerator	DuPont 13801S™ for improved pot life/dry (up to 2 oz per ready-to-spray gallon) DuPont 13803S™ for improved dry time (up to 2 oz per ready-to-spray gallon)
Anti-Crater	DuPont 13813S™ (up to 1 oz per ready-to-spray gallon) DuPont 13814S™ (up to 1 oz per ready-to-spray gallon) Do not use FEE

Application



Substrates and Surface Preparation

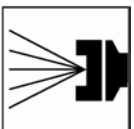
Surface preparation is critical to basecoat/clearcoat appearance. Follow basecoat or topcoat recoat-window guidelines to ensure proper adhesion. Substrate should always be thoroughly wiped/tacked immediately prior to clearcoat application.



Gun Setup

Imron® AF740™ can be applied with conventional, HVLP, air-assisted airless, and electrostatic spray equipment using pressure, siphon, or gravity fluid delivery.

<i>Conventional</i>	<i>Fluid Tip</i>
Pressure Pot	1.0 mm – 1.4 mm (.039" - .055")
Siphon Feed	1.0 mm – 1.4 mm (.039" - .055")
Gravity Feed	1.2 mm – 1.6 mm (.047" - .063")
<i>HVLP</i>	
Pressure Pot	1.0 mm – 1.4 mm (.039" - .055")
Siphon Feed	1.0 mm – 1.4 mm (.039" - .055")
Gravity Feed	1.2 mm – 1.6 mm (.047" - .063")

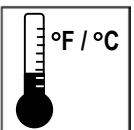


Fluid Delivery

Conventional	8 - 10 ozs/min
HVLP	8 - 10 ozs/min

Air Pressure

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



Environmental Conditions

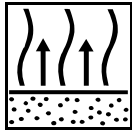
Substrate and ambient temperature must be between 50°F (10°C) and 110°F (43°C). The substrate must be at least 5°F (3°C) above the dew point. Relative humidity should be below 90%. Heating activated paint above 110°F (43°C) may cause gelation.

For optimum appearance spray Imron® AF740™ at 75°F (24°C) or warmer.



Application

Imron® AF740™ Clearcoat may be applied wet-on-wet over Imron® AF700™ Basecoat. Apply Imron® AF740™ using a cross-coat technique. Spray a wet first coat using a top-to-bottom motion. Spray a medium-wet second coat using a side-to-side motion to achieve 1.5 – 2.0 mils dry film build. Flash times between coats will vary between 30 seconds and 5 minutes. In general, the shorter the flash the smoother the appearance.



Dry Times

Force Dry at 130°F (54°C)

Flash Before Force Dry	none required
Dry to Touch	2 hours
Dry to Tape	4 hours

Air Dry at 70°F (21°C) with 2 oz DuPont 13803S™ per ready-to-spray gallon

Dry to Touch	4 hours
Dry to Tape	8 hours



Recoat

When recoating Imron® AF740™ with itself, scuff sanding is required if the clearcoat has air dried for more than 16 hours or if the basecoat has been force dried.



Cleanup Solvents

DuPont 13920S™ Low-VOC Cleaner
DuPont 13942S™ Reducer

Physical Properties

VOC

	<i>Less Exempts (LE)</i>	<i>As Packaged (AP)</i>
Imron® AF740™	3.8 lbs/gal	3.6 lbs/gal
Ready-to-Spray Imron® AF740™		
<i>With DuPont™ 13110S™ and 13930S™</i>	3.3 lbs/gal	3.0 lbs/gal
<i>With DuPont™ 13110S™ and 13895S™</i>	3.6 lbs/gal	3.5 lbs/gal

Factory-Packaged Clearcoat

Color	Clear
Closed Cup Flash Point	20°F – 73°F
Shelf Life	2 years (Unopened at 50° – 110°F)

Ready-to-Spray

Theoretical Coverage	792 ft ² /gal at 1 mil dry film thickness
Weight Solids	55%
Volume Solids	49%
Gallon Weight	8.5 lbs/gal

Dry Film

Gloss	≥ 90 measured at 60°
Recommended Film Thickness	1.5 – 2.0 mils

Coating Performance

Chemical and Solvent Resistance	Very Good
Weatherability	Excellent
Humidity Resistance	Excellent
Acid and Alkali Resistance	Excellent
Abrasion Resistance	Excellent
Flexibility	Excellent



Aviation Finishes

Safety and Handling

DuPont is committed to helping you develop and maintain a safe working environment. Carefully read the specific warnings and precautions printed on the labels and material safety data sheets (MSDS) of all DuPont products before handling and using. These products are for industrial use by trained professional painters only. Do not permit anyone in the painting area without protective equipment per product MSDS.

Revised 8/2007

