



DuPont OEM/Fleet Finishes

TECHNICAL MANUAL

IMRON® 5000 LOW VOC

POLYURETHANE ENAMEL

TYPE

A high performance, low VOC (<3.5 lbs/gal), two-component polyurethane enamel, ready-to-spray.

DESCRIPTION

Imron® 5000 is designed to deliver the premium quality and performance of standard Imron Polyurethane Enamel at a maximum applied VOC of 3.5 or 2.8 lbs/gal. The Imron 5000 line includes factory package, mixing machine and lead-free capability. Stock numbers for Imron 5000 3.5 VOC mixing colors begin with an "N" followed by four digits. Stock numbers for 2.8 VOC mixing colors begin with a "K" followed by four digits.

SUGGESTED USES

A high gloss, extremely durable, chemical and solvent resistant air dry enamel that is available in both solid and metallic colors. It is an extremely versatile product and is recommended for use on aircraft, commercial vehicles, trucks, trailers, and other applications where superior performance and appearance is required.

NOT RECOMMENDED FOR

- Immersion service.
- Use over old lacquer finishes.

COMPATIBILITY WITH OTHER COATINGS

Imron® 5000 can be applied over a number of DuPont primers, namely:

- Corlar® Primers
- DuPont Uro® Primers and Sealers
- Prime 'N Seal™
- Tufcote™ Primers

DRY FILM CHARACTERISTICS

- Chemical Resistance -- EXCELLENT
- Humidity Resistance -- EXCELLENT
- Weatherability -- EXCELLENT
- Acid Resistance -- EXCELLENT
- Alkali Resistance -- EXCELLENT
- Solvent Resistance -- VERY GOOD
- Abrasion Resistance -- EXCELLENT
- Flexibility -- EXCELLENT

MAXIMUM SERVICE TEMPERATURE

200°F (92°C) in continuous service.

VOLUME SOLIDS (MIXED 3:1 W/ 193S)

53.5%; average which will vary with color selected.

WEIGHT SOLIDS (MIXED 3:1 W/ 193S)

67%; average which will vary with color selected.

SUGGESTED DRY FILM THICKNESS

1.8 - 2.0 mils (depending on color)

THEORETICAL COVERAGE PER GALLON

835 sq. ft./gal. @1 mil.

GLOSS

High.
8928S Flattening Compound for Imron 5000 is available to obtain lower gloss if desired.

COLOR

Available in solid and metallic colors.

FLASH POINT (CLOSED CUP)

Below 80°F.

SHELF LIFE

12 months minimum.

APPLICATION SOLVENTS

Ready-to-spray below 3.5 lbs/gal VOC upon activation. Further reduction will result in greater than 3.5 lbs VOC.

CLEANUP SOLVENTS

DuPont Thinner 3602S.
Reducer 8685S.
Reducer 8695S.

IMRON® 5000 LOW VOC

POLYURETHANE ENAMEL

ACTIVATION

Add 3 parts Imron® 5000 Enamel with 1 part Imron Activator 193S (8909S for 2.8 VOC formulas) and mix thoroughly. Filter material prior to spray application. Up to 2 ounces per ready-to-spray spray gallon of Fast Dry Accelerator 389S should be added for improved pot life and dry time. Product upon activation will have a viscosity of 11 - 20 seconds in a Zahn #3 cup, depending on color.

INDUCTION TIME

No induction time is required.

POT LIFE

2 hours at 70°F.
2 - 4 hours at 70°F with 389S Accelerator.
45 minutes at 70°F with 8989S Accelerator.

ADDITIONAL COMMENTS

Heating activated material above 110°F will cause gelation.

When recoating Imron 5000 with itself, sanding is required if enamel has air dried more than 16 hours or been force dried.

APPLICATION CONDITIONS

Do not apply if material, substrate or ambient temperature is less than 50°F (10°C) or above 110°F (43°C). The substrate must be at least 5°F above the dew point. Relative humidity should be below 90%.

APPLICATION

Thoroughly mix Imron 5000 enamels prior to activation. The use of a Cyclone® Shaker is recommended.

For siphon gun application, set air pressure to 60 - 65 psi at the gun for solids and metallics.

For pressure pot set air pressure at 60 - 70 psi at the gun for solid and metallic colors. Fluid delivery should be set for 10 - 12 oz/min.

For solid colors and metallics use 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. Flash times between coats will vary between 30 seconds and 5 minutes. In general, the shorter the flash time, the smoother the appearance.

Do not spray Imron 5000 if the paint temperature is less than 75°F. Use warm water or paint heaters to heat the paint to an optimum temperature of 85 - 95°F. (In case of fish eyes, use Paint Additive 359S to 1 ounce per ready-to-spray gallon of Imron 5000 for solid colors; use 1 oz of VG-F-70050 for metallic colors. Do not use FEE.)

Use Fast Dry Accelerator 389S up to 2 ounces per activated gallon or force dry 30 minutes at 140°F.

CURE TIME AT RECOMMENDED THICKNESS (AT 77°F & 50% RH)

	without <u>accelerator</u>	with <u>389S</u>	with <u>8989S</u>
Dry to Touch	4-6 hours	1-2 hours	30 min - 1 hr.
Tack Free	10-12 hours	2-4 hours	1-2 hours
Tape Free	12-24 hours	4-6 hours	2-4 hours
Dry to Assemble	72 hours	72 hours	72 hours

Product may force dried 30 minutes at 180°F after a flash time of 15 minutes following application of final coat.

APPLICATION EQUIPMENT

Pressure Pot (recommended)
Suction Spray
Air-Assisted Airless
Airless
Gravity Feed Gun
HVLP

FOR VOC REGULATED AREAS

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

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 of all DuPont products before handling or using. These products are for industrial use by trained professional painters only.