

# Imron® MS600™ Polyurethane Topcoat

## Type

Imron® MS600™ is a high-performance single stage polyurethane topcoat.

## Description

Imron® MS600™ is an acrylic/polyester-based polyurethane coating designed to deliver excellent appearance and durability with ease of application. This high-solids topcoat has a ready-to-spray VOC of less than 3.5 lbs/gal and is available in factory packaged whites and mixed colors

## Recommended Uses

Imron® MS600™ is an air dry product recommended for above the water line marine applications where excellent appearance, durability, sag resistance, and ease of use are required. Imron® MS600™ is recommended for use with Corlar® 18510S™ and DuPont™ 18530S™ Urethane Primers for maximum topcoat appearance. It may be used over most aged and hard cured coatings in good condition.

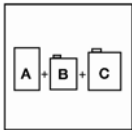
## General Information for Use



### Components

Imron® MS600™ Color  
DuPont™ 18100S™ Urethane Activator  
Imron® 18765S™ Low Temperature Reducer (< 70° F)  
Imron® 18775S™ Medium Temperature Reducer (70 – 85° F)  
Imron® 18785S™ High Temperature Reducer (>85° F)

Imron® Reducers are available for a range of application conditions. Suggested usage ranges are dependent on air flow and relative humidity.

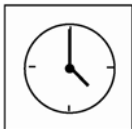


### Mix Ratio

Thoroughly mix Imron® MS600™ Color prior to activation. Filter activated material prior to spray application.

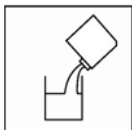
<i>Three Component System</i>	<i>Parts by Volume</i>
Imron® MS600™ Color	2
DuPont™ 18100S™ Urethane Activator	1
Imron® Reducer 187X5S (Temperature dependent)	1

Viscosity will be 16-19 seconds in a Zahn #2 cup.



### Pot Life and Induction Time

Pot life is 4 hours at 70°F (21°C), approximately 2 hours at 90°F (33°C)  
No induction time is required.



### Additives:

Accelerator DuPont™ 18820S™ Urethane Accelerator  
For temperatures below 70°F (21°C), DuPont™ 18820S™ Urethane Accelerator can be used up to 2 oz per RTS gallon of Imron® MS600™ Topcoat to speed dry time and extend pot life.

Flattener DuPont™ PT196™ MS600™ Flattener  
Refer to Flattener Data Sheet for starting point recommendations.

Anti-Crater DuPont™ 18801S™ (up to 1oz per ready to spray gallon)  
DuPont™ 18802S™ (up to 1oz per ready to spray gallon)

There are many causes for craters, anti-crater additives may not be able to overcome all causes. These additives will not compensate for severe surface contamination or improper preparation. Begin with DuPont™

18801S™ as an anti-crater additive followed by DuPont 18802S™ if conditions do not improve. Excessive use of anti-crater additives will affect surface wetting, melt in and repair.

## Guidelines for Use



### Substrates and Surface Preparation

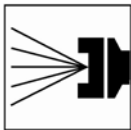
Surface preparation is critical to topcoat appearance and system performance. Primers should be properly applied and cured according to product data sheets. Surface immediately below topcoat should be cleaned, then DA sanded with 320 to 400 grit for optimum performance. Substrate should always be thoroughly wiped/tacked immediately prior to topcoat application.



### Gun Setup

Imron® MS600™ Topcoat 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	1.0mm – 1.4mm (.039" - .055")
	Siphon Feed	1.4mm – 1.6 mm (.055" - .063")
	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	1.4mm – 1.6 mm (.055" - .063")
	Gravity Feed	1.2 mm – 1.6 mm (.047" - .063")

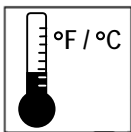


### Fluid Delivery

Conventional	10 – 12 ozs/min
HVLP	10 – 12 ozs/min

### Air Pressure

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

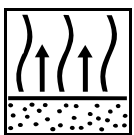


### Environmental Conditions

Substrate and ambient temperature must be between 55°F (13°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.

### Application

Spray a medium-wet first coat. Allow first coat to flash for 5 – 20 minutes prior to second coat. Apply second coat as a wet cross-coat to achieve 2.0 – 2.5 mils dry film build. Material should be cured a minimum of 72 hrs before placed into limited service.



### Dry Times

*Air Dry at 70°F (21°C)*

Dry to Touch	4–6 hours
Dry to Tape	overnight



### Recoat

When recoating Imron® MS600™ Topcoat with itself, scuff sanding (400 grit with DA) is required if the topcoat has air dried for more than 48 hours or if the topcoat has been force dried.



### Cleanup Solvents

DuPont™ 105™ Thinner or DuPont™ 106™ Thinner

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## Flattening

DuPont™ PT196™ Flattener can be added to lower gloss of MS600™. The amount to be added varies by color. Contact DuPont for color availability.

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## Physical Properties

VOC	<u>Less Exempts (LE)</u>	<u>As Packaged (AP)</u>
Ready-to-Spray Topcoat	3.5 lbs/gal	2.9 lbs/gal

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## Factory-Packaged and Mixed Colors

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

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## Ready-to-Spray\*

Theoretical Coverage	680 ft <sup>2</sup> /gal average at 1 mil DFT (670 - 688 ft <sup>2</sup> /gal)
Weight Solids	52% average (48 – 56%)
Volume Solids	42% average (41 - 43%)
Gallon Weight	9.3 lbs/gal average (8.5 – 10.1 lbs/gal)

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## Dry Film

Gloss	≥ 90 measured at 60°
Recommended Film Thickness	2.0 – 2.5 mils

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## 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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## 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.

Do not allow material or overspray to enter drains or waterways.

E-R 4691/K-17184  
Revised 8/2010