

# Imron® MS100™ Polyurethane Basecoat

## Type

Imron® MS100™ is a high-performance polyurethane basecoat, combining with Imron® MS1™ Clearcoat to form a complete multi-stage basecoat/clearcoat system for the Marine market

## Description

Imron® MS100™ is an acrylic/polyester-based polyurethane coating designed to deliver excellent appearance, durability, and eye-catching color. This high-solids basecoat has a ready-to-spray VOC of less than 3.5 lbs/gal and is available in solid, metallic-effect and pearl-effect mixed colors.

## Recommended Uses

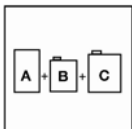
Imron® MS100™ when combined with Imron® MS1™ Clearcoat provides a premium appearance in a rainbow of colors. For optimum results, Imron® MS100™ is recommended for use with DuPont™ Corlar® 1851XS™ and DuPont™ 1853XS™ Urethane Primers for maximum topcoat appearance. It may be used over most aged and hard cured coatings in good condition.

## General Information for Use



### Components

Imron® MS100™ Color  
Imron® 18105S™ Basecoat Activator  
Imron® 18070S™ Basecoat Reducer

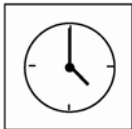


### Mix Ratio

Thoroughly mix Imron® MS100™ prior to activation. Filter activated material prior to spray application.

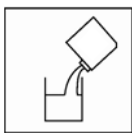
<i>Three Component System</i>	<i>Parts by Volume</i>
Imron® MS100™ Color	3
Imron® 18105S™ Basecoat Activator	1
Imron® 18070S™ Basecoat Reducer	1 (optional)

Viscosity will be 17 - 21 seconds in a Zahn #2 cup reduced / ready to spray.



### Pot Life and Induction Time

Pot life is 2 hours at 70°F (21°C)  
Induction Time: None



### Additives

Accelerator                      DuPont™ 18820S™

For temperatures below 70°F (21°C), DuPont™ 18820S™ Urethane Accelerator can be used up to 2 oz per RTS gallon of Imron® MS100™ Basecoat to speed dry time and extend pot life

Anti-Crater

DuPont™ 18801S™ solid colors only (up to 1 oz per ready-to-spray gallon)  
Do not use FEE or DuPont™ 18802S™

## Guidelines for Use

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### Substrates and Surface Preparation

Surface preparation is critical to 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

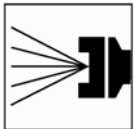
Imron® MS100™ can be applied with conventional, HVLP, air-assisted airless, and electrostatic spray equipment using pressure, siphon, or gravity fluid delivery.

#### *Conventional Fluid Tip*

Pressure Pot	1.0 mm – 1.4 mm (.039" - .055")
Siphon Feed	1.0 mm – 1.6 mm (.039" - .063")
Gravity Feed	1.0 mm – 1.6 mm (.039" - .063")

#### *HVLP*

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

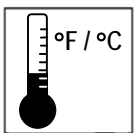


### Fluid Delivery

Conventional	10 - 12 ozs/min
HVLP	10 - 12 ozs/min

### Air Pressure

Conventional	50 – 60 psi atomizing air
HVLP	30 – 35 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%.

For optimum appearance, spray Imron® MS100™ at 75°F (24°C) or warmer. Heating activated paint above 110°F (43°C) may cause gelation.



### Application

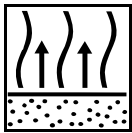
Solid colors: Apply Imron® MS100™ basecoat in a single cross-coat allowing a flash between 30 seconds to 5 minutes.

Effect colors: Apply a first medium wet coat with a 5 to 15 minute flash time, followed by a second medium wet coat. To minimize mottling and tiger striping, apply control/final coat diagonally at a distance of 12 to 14 inches from the substrate.

**Note:** Colors containing high loadings of pearl are not recommended for large areas.

Flash Imron® MS100™ basecoat from 30 to 60 minutes before applying Imron® MS1™ Clearcoat. Apply Imron® MS1™ Clearcoat in 2 coats, 30 minute flash between coats to achieve 4-5 mils wet film thickness total.

Also refer to the Imron® MS1™ product data sheet.



### Dry Times

*Air Dry at 70°F (21°C)*

Dry to Touch 4 hours  
Dry to Tape 8 – 12 hours



### Recoat

When recoating Imron® MS100™ with itself or with clearcoat, scuff sanding is required if the basecoat has air dried for more than 24 hours.



### Cleanup Solvents

DuPont™ 105™ Thinner or DuPont™ 106™ Thinner

### Physical Properties

VOC (Theoretical)	<i>Less Exempts (LE)</i>	<i>As Packaged (AP)</i>
Imron® MS100™	3.8 lbs/gal	3.6 lbs/gal
Ready-to-Spray Imron® MS100™ (Unreduced)	3.4 lbs/gal	3.2 lbs/gal
Ready-to-Spray Imron® MS100™ 3:1:1	3.4 lbs/gal	2.5 lbs/gal

### Mixed Colors

Color Solid, Metallic, and pearl colors  
Closed Cup Flash Point 20°F – 73°F  
Shelf Life 1 year (Stored Unopened at 50 -100 deg F)

Ready-to-Spray	Unreduced	Reduced 3:1:1
Theoretical Coverage (at 1 mil dry film thickness)	800 ft <sup>2</sup> /gal	727 ft <sup>2</sup> /gal
Weight Solids	60%	55%
Volume Solids	50%	45%
Gallon Weight	8.9 lbs/gal	8.7 lbs/gal

### Dry Film

Gloss ≥ 90 measured at 60° with clearcoat  
Recommended Film Thickness .8 – 1.4 mils (to hiding)

### Coating Performance

Chemical and Solvent Resistance Excellent  
Red Diesel Staining Resistance Very Good  
Weatherability Excellent  
Humidity Resistance Excellent  
Acid and Alkali Resistance Excellent  
Abrasion Resistance Excellent  
Flexibility Excellent.

## **Safety and Handling**

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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 approved ventilation, and gloves.

Do not allow material or overspray to enter drains or waterways

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