



Imron® MS100™ Polyurethane Basecoat



GENERAL

DESCRIPTION

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. Intended for use with Imron MS1™ clearcoat to form a complete multi-stage basecoat/clearcoat system for the marine market.

RECOMMENDED USES

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

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



MIXING

COMPONENTS

Imron MS100 color
Imron 18105S™ Basecoat Activator
Imron 18070S™ Basecoat Reducer
Imron 18900S™ Performance Enhancer

MIX RATIO

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

Three Component System

	Parts by Volume
Imron MS100 color	3
Imron® 18105STM Basecoat Activator	1
Imron® 18070S™ Basecoat Reducer (optional)	1

Parts by Volume

Performance Enhancer System

	Parts by Volume
Imron MS100 color	3
18100S Urethane Activator	1
Imron 18900S™ Performance Enhancer	0.5

VISCOSITY

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

INDUCTION TIME

No induction time is required prior to application.

POT LIFE

Pot life is 2 hours at 70°F (21°C).



ADDITIVES

Accelerator

- 13801S™, 13803S™, or 13808S™ accelerators
- For temperatures below 70°F (21°C), 13803S Urethane Accelerator can be used up to 2 oz per RTS gallon of Imron MS100 Basecoat to speed dry time and extend pot life.

Performance Enhancer

- Imron™ 18900S Performance Enhancer can be added to maximize appearance and cross-coat application of MS100. Refer to mix ratio information for recommendations.

Anti-Crater

- Add up to 1 oz 13813S™ per RTS gallon in solid colors only



APPLICATION

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.

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.

GUN SETUP

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

Conventional

Pressure Pot
Gravity Feed

Fluid Tip

1.0 mm – 1.4 mm (.039" - .055")
1.0 mm – 1.6 mm (.039" - .063")

HVLP

Pressure Pot
Gravity Feed

1.0 mm – 1.4 mm (.039" - .055")
1.2 mm – 1.6 mm (.047" - .063")

FLUID DELIVERY

Conventional
HVLP

10-12 oz./minute
10-12 oz./minute

AIR PRESSURE

Conventional
HVLP

50-60 psi atomizing air
30-35 psi atomizing air

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.

For Performance Enhancer

Apply 1 medium coat at a gun distance of 6” inches from the surface with an even 50% overlap to achieve 100% opacity (color hiding), followed immediately with one medium coat at a gun distance of 8-10” inches from the surface. Apply all coats wet-on-wet. Do not flash between coats.

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.

CLEANUP SOLVENTS

Axalta 107™ Low VOC Gun & Equipment Cleaner
 Axalta 105™ Gun & Equipment Cleaner



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.



PHYSICAL PROPERTIES

VOC	<u>Less Exempts (LE)</u>	<u>As Packaged (AP)</u>
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 (Unopened at 50°-110°F)

READY-TO-SPRAY

	<u>Unreduced</u>	<u>Reduced 3:1:1</u>
Theoretical Coverage (at 1 mil dry film thickness)	800 ft ² /gal	727 ft ² /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°
 Recommended Film Thickness 0.8 – 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

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 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.

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