

Imron® Industrial Strength Ultra Low VOC Polyurethane High Gloss Topcoat (Mix Quality GN)



GENERAL

DESCRIPTION

A high gloss, 0.3 lbs/gal VOC conforming, low HAPS, polyurethane topcoat. The resulting finish product is designed to provide a brush, roll or sprayable topcoat suitable for use in any environment where long-term color and gloss retention are desired.

SUGGESTED USES

As a high performance, tough, industrial strength polyurethane topcoat over properly prepared and primed aluminum, carbon steel, galvanized, concrete or dry wall where:

- Long-term color retention is desired
- Long-term gloss retention is desired
- Low environmental footprint is desired
- Application by brush, roll or spray is desired
- Excellent chemical resistance
- Very good Skydrol® resistance is needed
- Outstanding flexibility is needed
- Faster dry times are desired
- In-field color shading is needed

COMPATIBILITY WITH OTHER COATINGS

- Aged Imron Industrial Strength High Gloss Topcoat may be re-coated with itself following washing with clean, fresh water – no mechanical surface preparation is required.
- Imron Industrial Strength High Gloss Topcoat can be applied over other Axalta coatings including, but not limited to Imron Industrial Strength primers, Imron Waterborne Polyurethane Copolymer coatings, Corlar® epoxies, Tufcote™ acrylics, and Tufcote alkyd primers.
- Imron Industrial Strength High Gloss Topcoat may be used over most aged and hard-cured coatings in good condition. Testing for lifting, bubbling and adhesion is recommended to assure compatibility with unknown coatings. Contact your Axalta representative for specific recommendations.

NOT RECOMMENDED FOR

Immersion Service

PERFORMANCE PROPERTIES

Abrasion & Mechanical	Excellent
Alkalis	Excellent
Humidity	Excellent
Solvents	Very Good
Color & Gloss Retention	Excellent
Acids	Excellent
Salts	Excellent
Weather	Excellent

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

COLOR

Imron Industrial Strength is an intermix system utilizing 17 balanced factory packaged colors. These colors can be used by themselves as topcoats or in combination with other colors to make thousands of high gloss mixed colors.

Color Availability:

9T01 – White	9T07 – Blue Green Shade	9T13 – Orange
9T02 – Black (match to 1640)	9T08 – Yellow Oxide	9T14 – Transparent Red
9T03 – Yellow	9T09 – Green	9T15 – Magenta
9T04 – Violet	9T10 – Red	9T16 – Violet-Blue Shade
9T05 – Yellow Orange Shade	9T11 – White (match to 1632)	9T17 – Blue-Red Shade
9T06 – Red Orange Shade	9T12 – Red Oxide	



MIXING

COMPONENTS

17 factory packaged colors – 9TXX
 9T00-A Activator

1 gallon container 80% full (102.4 oz.)
 1 quart container 80% full (25.6 oz.)

MIX RATIO

Component	Part by Vol.
Imron 9TXX Base (GN)	4
Imron 9T00-A Activator	1

ACTIVATION

Thoroughly mix all colored portions until uniform. To 4 parts 9TXX base, add 1 part Imron 9T00-A Activator. If using a mix formula, follow specific color formula for color desired. Measure out appropriate amounts, add activator and mix thoroughly.

MIXING AND REDUCTION

For most applications, add 5 – 15% Imron 9M01 or 9M02 Thinner reducer depending upon application conditions and methods. Mix until uniform. Mix thoroughly using a mechanically powered shear “Jiffy” mixer with variable RPM settings; use medium speed RPM. Move mixer up and down through paint for uniform mixing. **DO NOT SHAKE.**

Normally 5-15% reduction with Imron 9M01 or 9M02 Reducer is adequate for spray application, pressure pot and airless, depending upon conditions and equipment. To help maximize pot life, up to 25% may be added. For maximum appearance, up to 25% Imron 9M01 or 9M02 may be added. For brush applications, add 5-10% 9M01 or 9M02 Thinner. For rolling applications, add 1 oz of Imron 9M05 Rolling Additive per activated gallon and 5-10% 9M01 or 9M02 Reducer. After addition of 9M05 Rolling Additive, allow 5 minutes induction before application. If faster recoat and handling are required, add up to 2 oz. VG-805 Accelerator. If accelerators have been used, recoating must be done within 48 hours. If more time has elapsed, scuff sand to ensure adhesion. Use of 9M02 Pot Life Extender / Reducer will affect VOC. Please see VOC section. **Use only recommended reduction solvents.**

APPLICATION THINNERS

Spray, Brush and Roll – Below 80°F	Imron 9M01	Rolling Additive - Imron 9M05
Spray, Brush and Roll – Above 80°F	Imron 9M02	

INDUCTION TIME

None unless 9M05 Rolling Additive is used, then 5 minute induction before applying.

POT LIFE

1.5 hours @ 77°F and 50% RH. Higher temperatures or the addition of Imron VG-805 Accelerator may shorten pot life.



APPLICATION

SURFACE PREPARATION

Newly primed and top-coated surfaces should be clean and dry. If contaminated, detergent/water wash, then blow dry. Previously painted surfaces should have all loose paint removed and the edges feathered. Prime bare spots with appropriate prime before applying topcoat.

APPLICATION CONDITIONS

Do not apply if the application surface temperature is below 45°F (7°C) or above 110°F (43°C), or if the atmospheric temperature is within 5°F of the dew point. For application temperatures below 45°F, the use of 2 oz. Imron VHY-691 is recommended. Relative humidity should be below 90%.

APPLICATION EQUIPMENT

- Apply by spray, brush or roll
- Manufacturers listed below are a guide. Others may be used. Changes in pressure and tip size may be required to achieve proper application.

ROLL

Manufacturer: Wooster® Pro/Doo-Z™ ¼" – ½" nap

- Add 1 oz./gallon Imron 9M05 Rolling Additive to eliminate bubbles. Craters may develop if you exceed 2 oz./gallon.
- Add 5-10% Imron 9M01 or 9M02 reducer to maintain wet edge.
- May be cross-rolled.
- For best results, allow 5 minutes mix time after adding Imron 9M05.

BRUSH

Manufacturer: Wooster® China Bristle

- Add 5-10% Imron 9M01 or 9M02 reducer to maintain wet edge.
- Do not cross brush to reduce lap marks.

CONVENTIONAL

May be recoated by spray when tack-free. Imron 9M05 Rolling Additive is not recommended for spray application.

Manufacturer | Model | Tip Size

Sata	K3 RP	1.0-1.3mm
Devilbiss	JGA, MBC	1.1-1.4mm
Graco	DeltaSpray XT	1.0-1.5mm
Iwata	W-77, W-71, or W-200	1.2-1.8mm
Binks	2001 or 95	1.2-1.8mm
Kremlin	M22HPAP	1.2-1.8mm

*Fluid lines 3/8" ID or larger are required for proper fluid delivery.

HVLP SPRAY

Manufacturer | Model | Tip Size

Sata	3000RP HVLP	1.2-1.6mm
Devilbiss	JGVH, EXL, or FLG	1.3-1.8mm
Graco	DeltaSpray XT - HVLP	1.3-2.2mm
Iwata	LPH 200 L VLP	0.8-1.2mm
Binks	Mach 1 & 1SL	1.0-1.7mm
Kremlin	E3K HVLP	1.5-1.8mm

AIRLESS SPRAY

Graco	Silver or Plus	Airless tip size .011 - .015	Pump 30:1 min
Iwata	ALG or Airlessco Guns	Airless Tip Size .011 - .015	Pump ALG 30:1 min
Binks	Airless 1	Airless Tip Size .011 - .017	Pump 30:1 min
Kremlin	Airless 250 II	Airless Tip Size .013 - .017	Pump Orca 32:1

CLEAN UP THINNERS

Imron 9M01, T-1021



DRY TIMES

Cure Time in hours at recommended thickness 2 to 3 mils DTF

	77°F (25°C) and 50% RH		90°F (32°C) and <25% RH	
	20% 9M01 Reducer Without VG-805	20% 9M01 Reducer With 2 oz. VG-805	20% 9M02 Reducer Without VG-805	20% 9M02 Reducer With 2 oz. VG-805
Dry to Touch	3	1	2	1
Tack Free	3	2	2	1
To Handle	4.5	2	3.5	2
To Recoat	4	2	3	2
Hard Dry	18	12	16	10
Pot Life	1.5	2	3	2
Full Cure	7 days	6 days	7 days	6 days

Dry times can be improved by adding up to 2 oz. of Axalta VG-805 Accelerator per activated gallon. If accelerators have been used, recoating must be done within 48 hours. If more time has elapsed, scuff sand to ensure adhesion. May be recoated by spray when tack-free.



PHYSICAL PROPERTIES

Maximum Service Temperature	250°F (93°C) in continuous service. 300°F (148°C) in intermittent heat. Some yellowing of light colors may occur at elevated temperatures
Volume Solids	67% ± 2%
Weight Solids	68% ± 2%
Theoretical Coverage Per Gallon	994 ft ² (24.3 m ² /l) @ 1 mil dft 497 ft ² (12.1 m ² /l) @ 2 mil dft Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements
Weight Per Gallon	8.9 – 10.5 lbs/gal - average varies with color
Shipping Weight (approximate)	
1 gallon container:	10-12 lbs
quart activator:	2-3 lbs
Suggested Film Thickness	3-5 mils (75-125 µm) wet 2-3 mils (50 – 75 µm) dry Application by brush and roller may require additional coats to achieve recommended films thickness.
Flash Point	Between 73° to 100°F (23° to 38°C)
Gloss	90+ 60° angle
Shelf Life	12 months minimum

STORAGE CONDITIONS

Store in a dry, well-ventilated area. Storage conditions should be between 35°F (2°C) and 120°F (48°C).

Please consult MSDS for both products for proper protective equipment and safety and health information.

VOC REGULATIONS

VOC (Theoretical less water and exempt compounds).
This product contains TBAC.

	4 to 1 25% Reduction TBAC Exempt*			4 to 1 25% Reduction TBAC Non-Exempt		
	No Reduction	9M01	9M02	No Reduction	9M01	9M02
Without 2 oz VG-805	0.3	0.3	0.9	2.3	2.3	2.8
With 2 oz VG-805	0.4	0.4	1.0	2.4	2.4	2.9

*Where TBAC is considered an exempt solvent for contains requirements.

HAPS INFORMATION – THEORETICAL

Imron Industrial Strength Topcoat – Mixed 4 to 1 no reduction – 0.01 lbs/gal solids
 Imron Industrial Strength Topcoat – Mixed 4 to 1 with 25% Imron 9M01 or 9M02 Thinner and 2 oz.
 VG-805 Accelerator – 0.01 lbs/gal solids

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.

ASTM INFORMATION

Physical properties are averages. Properties listed are for a system of Corlar LV SG and Imron Industrial Strength. Total DT 7 mils. For other system recommendations, please contact Axalta Coating Systems.

Salt Fog (ASTM B-117)	500 hours 1000 hours 1500 hours	10 - No rusting 10 - No rusting No rust, few #8 blisters at the scribe 10 - No undercutting
Humidity Resistance (ASTM D2247)	500 hours 1000 hours 1500 hours	10 - No blisters 10 - No blisters 10 - No blisters
Adhesion (ASTM D3359-02 A/B)	5/5	Excellent
QUV A (ASTM D4587)	1500 hours	Gloss Before 91% Gloss after 89% % Retention 98%
Cleveland Condensing (ASTM D4585)	1000 hours	No rusting, no blistering, no delamination
Impact (ASTM D2794)	20 in pounds with primer	
80 in pounds without primer		
Mandrel Bend (ASTM D522)	> 28% Passes	
Pencil Hardness (ASTM D3363)	H – 2H	
Persoz Hardness (ANS/ISO 1522)	80 sec	

SELECT CHEMICAL REISITANCE – THE FOLLOWING ARE CHEMICAL RESISTANCE RATINGS FOR 24 HOUR WATCH GLASS TESTING. RATING SCALE USED WAS A SCALE 1-10, 10 BEING THE BEST.

	RATING		RATING
1% HCL (HYDROCHLORIC ACID)	10	(ISOPROPYL ALCOHOL)	9
1% H2SO4 (SULFURIC ACID)	10	(ETHYLENE GLYCOL MONOBUTYL ETHER)	9
10% H2SO4 (SULFURIC ACID)	9	(ETHYL ACETATE)	10
1% HNO3 (NITRIC ACID)	3	(TOLUENE)	9
5% DMEA (N-DIMETHYLETHALNOLAMINE)	9	MEK (METHYL ETHYL KETONE)	9
1% H3PO4 (PHOSPHORIC ACID)	10	28% (AMMONIUM HYDROXIDE)	9
10% H3PO4 (PHOSPHORIC ACID)	10	(AROMATIC MINERAL SPIRITS)	10
MEK (METHYL ETHYL KETONE)	9	(AROMATIC HYDROCARBON)	9
1% NH4OH (AMMONIUM HYDROXIDE)	10	10% NAOH (SODIUM HYDROXIDE)	10
5% NH4OH (AMMONIUM HYDROXIDE)	10	MOTOR OIL (MOBIL 10W-30)	10
10% NH4OH (AMMONIUM HYDROXIDE)	10	HYDRAULIC OIL (PENNZOIL)	10
1% NAOH (SODIUM HYDROXIDE)	10	CUTTING OIL (RIGID)	10
5% NAOH (SODIUM HYDROXIDE)	10	UNLEADED GAS	10
ETHANOL	10	SKYDROL (500 B4L)	7
DIETHYLENE GLYCOL MONOBUTYL ETHER	9	TIDE SOAP 10%	10
DBE (DIBASIC ESTERS)	9	FANTASTIC	10
(AROMTIC CONTROLLED VM&P NAPHTHA)	9	BLEACH	10
(AROMATIC HYDROCARBON)	9	BRAKE FLUID (DOT 3 WAGNER PREMIUM)	9
		COLA	10

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.

All technical advice, recommendations and services are rendered by the Seller gratis. They are based on technical data which the Seller believes to be reliable, and are intended for professional use by persons having skill and know-how at their own discretion and risk. Seller assumes no responsibility for results obtained or damages incurred from their use by Buyer in whole or in part. Such recommendations, technical advice or services are not to be taken as a license to operate under or intended to suggest infringement of any existing patent.

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In the United States:
1.855.6.AXALTA
axalta.us

In Canada:
1.800.668.6945
axalta.ca

