Imron® 2.1 HG-C
High Gloss Polyurethane Clearcoat

GENERAL

DESCRIPTION
Imron 2.1 HG-C High Gloss Aliphatic Polyurethane Clearcoat is a high-solids, two-package, VOC conforming, 2.1 lbs./gal, very low HAPS clearcoat based on Axalta resin technology, producing properties of both polyester and acrylic polyurethane. The resulting highly durable finish delivers industry leading polyurethane performance, and enhances & extends the appearance and durability over traditional systems not using a clear coat.

SUGGESTED USES
As a high performance clearcoat over suitable topcoats, and properly prepared steel, galvanized steel, stainless steel, aluminum, concrete, concrete block, fiberglass, plastics and wood where:

- Extending the already outstanding color and gloss properties of Imron topcoats is desired
- Excellent resistance to chemical and/or marine environments is required.
- Outstanding abrasion resistance and flexibility are required.
- Application by brush and roller, in addition to spraying, may be necessary
- Application must be made at temperatures as low as 35°F

COMPATIBILITY WITH OTHER COATINGS
- Imron 2.1 HG-C can be applied over other Axalta general industrial products including, but not limited to, Imron Solvent Borne Polyurethanes, Imron Waterborne Polyurethane Copolymer coatings, Corlar® Epoxies, Tufcote™ Acrylics, and Tufcote Alkyd primers.
- Imron 2.1 HG-C can 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 Coating System 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

COLOR
HGC-1333 - Clear

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

MIXING

COMPONENTS

HGC-1333 Clearcoat	1 gallon container 75% Full
9T00-A Activator	quart container 100% Full

MIX RATIO

Component	**Part by Vol.**
Imron 2.1 HG-C Clear	3
Imron 9T00-A Activator	1
T-1021 or T-1022 Thinner	10%

ACTIVATION

Thoroughly mix 3 parts Imron 2.1 HG-C Clear (HGC-1333), then add 1 part of Imron 9T00-A Activator mix well by stirring. No induction period is necessary.

REDUCTION

Use 10% reduction for spray application depending upon conditions and equipment. Add 5%-10% Axalta T-1021 or T-1022 Thinner for brush and roll application. If bubbles develop during roller application, add 1 oz. Axalta RT002P per activated gallon. After addition, allow 5 minutes induction before application. Use Axalta T-1021 Thinner for normal conditions below 80°F and T-1022 Thinner for hot and windy conditions above 80°F. If faster recoat and handling are required, add up to 2 oz. MasterTint 389S or up to 2 oz. Axalta VHY-691. To maximize pot-life use 2 oz. 389S.

Note: If accelerator has been used, recoating must be done within 48 hours. If more time has elapsed, scuff sand to assure adhesion.

ADDITIVES & APPLICATION THINNERS

Spray & Brush:	Axalta T-1021 – Below 80°F
	Axalta T-1022 – Above 80°F
Roll:	Axalta T-1021 & RT002P - Below 80°F
	Axalta T-1022 & RT002P - Above 80°F

APPLICATION

SURFACE PREPARATION

New topcoat 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 primer and color coat.

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 Imron VHY-691 is recommended. Relative Humidity should be below 90%.

ROLL APPLICATION

Manufacturer: Wooster Pro/Doo-Z ¼”-½” nap

- Add 1 oz. /gallon Axalta RT002P Rolling Additive to eliminate bubbles. Craters may develop if you exceed 2 oz. /gallon.
- Add 5-10% Axalta T-1021 or T-1022 thinner to maintain wet edge.
- May be cross-rolled.
- For best results, allow 5 minutes mix time after adding RT002P.
- Do not use RT002P in spray applications.

BRUSH APPLICATION

Manufacturer: Wooster China Bristle

- Add 5-10% Axalta T-1021 or T-1022 reducer to maintain wet edge. Do not cross brush to reduce lap marks. Add up to 1 oz./gallon Axalta RT002P Rolling Thinner to eliminate bubbles.
- For best results, allow 5 minutes mix time after adding RT002P.
- Do not use RT002P in spray applications.

SPRAY APPLICATION

	CONVENTIONAL	
Manufacturer	DeVilbiss	Sata
Spray Gun	JGA	K3 RP
Fluid Tip	FF (1.4)	1.1
Air Cap	765	-
Pot Pressure	15 psi	15 psi
Atomizing Pressure	50 psi	36 psi

	HVLP
Manufacturer	DeVilbiss
Spray Gun	GTI
Tip Size	1.4 mm
Air Pressure	10 psi @ air cap
Fluid Hose	3/8” X 60’ Max.
Fluid Delivery	10 – 12 oz.
Air Cap	2000

	AIRLESS	**AIR ASSISTED AIRLESS**
Manufacturer	Graco	Graco
Pump	Xtreme 33:1	Senator 12:1
Filter	60 Mesh	-
Fluid Hose	3/8” X 100’ Max.	3/8” X 50’ Max.
Spray Gun	238591	217292
Tip Size	.411-.611	.023 - .029
Pressure	2400 psi min	-

CLEAN UP THINNERS

Axalta T-1021 or Acetone

DRY TIMES

Cure Time At Recommended Thickness 1.5 to 2.0 mils DTF 77°F (25°C) and 50% RH

	Without Accelerator	Hours w/ 2 oz. MasterTint 389S
Dry to Touch	2 hours	1.5 hours
To Recoat	6 hours	2.5 hours
To Handle	24 hours	5 hours
Pot Life	2-2.5 hours	3-3.5 hours
Full Cure	7 days	4 days

Notes: Dry times can be improved by adding up to 2 oz. MasterTint 389S or Axalta VHY-691 Accelerator per activated gallon. The use of MasterTint 389S is recommended to maximize pot life. May be recoated by spray when tack-free.

PHYSICAL PROPERTIES

Maximum Service Temperature	250ºF (93ºC) in continuous service 300ºF (148ºC) in intermittent heat Some yellowing of light colors may occur at elevated temperatures.
Volume Solids	60% ± 2%
Weight Solids	66% ± 3%
Theoretical Coverage Per Gallon	962 ft² (23.5 m²/l) @ 1 mil DFT 481 ft² (11.7 m²/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	8.62 lbs./gal ± 0.2 lbs. – avg. varies with color
Packaging | Clear	1's (75% full)
| Activator	Quarts and gallons
Shipping Weight (approximate)	
Clear 1 gallon: 10 lbs.	
Activator 1 quart: 3 lbs.	1 gallon: 12 lbs.
Suggested Film Thickness:	3-4 mils (75-100 µm) wet 1.5-2 mils (37-50 µm) dry

Application by brush and roller may require additional coats to achieve recommended films thickness.

Flash Point:	Between 20º to 73ºF (-6º to 23ºC)
Gloss (ASTM D523):	>90 measured at 60º angle
Shelf Life:	12 months minimum

STORAGE CONDITIONS

Store in a dry, well-ventilated area. Storage conditions should be between -30ºF (34ºC) and 120ºF (48ºC).

Mixed product will have the properties of all mixing components. Please consult MSDS for both products for proper protective equipment and safety and health information.

VOC REGULATIONS

VOC (Theoretical less water and exempt compounds).

Mixed VOC, no reduction	1.92 lbs./gal. (230 g/l)
Mixed VOC, @ maximum recommended reduction & 2 oz. MasterTint 389S or 2 oz. Imron VHY-691 Accelerator	2.08 lbs./gal. (249.6 g/l)

HAPS INFORMATION-THEORETICAL

Mixed HAPS, no reduction	0.02 lbs./gal of solids (2.4 g/l)
Mixed HAPS @ maximum recommended reduction & 2 oz.; MasterTint 389S or 2 oz. Imron VHY-691 Accelerator	0.10 lbs./gal of solids (12 g/l)

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 2.1 ST, Imron2.1 HG, Imron 2.1 HG-C Clear. Total DFT 9 mils.

Salt Fog (ASTM B-117)	500 hours	No rust, no blistering
	1000 hours	No rust, no blistering
	1500 hours	No rust, no blistering
Humidity Resistance(ASTM D2247)	500 hours	No rust , no blistering
	1500 hours	No rust, few #6 blisters
		No rust, few #6 blisters
Adhesion (ASTM D4541 -02)	1304 psi	Excellent
Adhesion (ASTM D3359-02 A/B)	5/5	Excellent

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 (HYDROCHLORICACID)	10	MINERAL SPIRITS	10
1% H2SO4 (SULFURIC ACID)	8	MOTOR OIL - MOBIL 10W-30	10
10%H2SO4 (SULFURICACID)	10	HYDRAULIC OIL – PENNZOIL	10
1%HNO3 (NITRICACID)	8	CUTTING OIL – RIGID	10
1%H3PO4 (PHOSPHORIC ACID)	8	UNLEADED GAS	10
10%H3PO4 (PHOSPHORIC ACID)	8	TIDE SOAP	10
1%NH4OH (AMMONIUMHYDROXIDE)	8	FANTASTIC	10
5%NH4OH (AMMONIUMHYDROXIDE)	10	HOUSEHOLD BLEACH	10
10%NH4OH (AMMONIUMHYDROXIDE)	8	COLA	10
1%NAOH (SODIUMHYDROXIDE)	8	ISOPROPYL ALCOHOL	8
5%NAOH (SODIUMHYDROXIDE)	10	29% NH4OH (AMMONIUM HYDROXIDE)	10
VMP NAPTHA	10	ETHYL ACETATE	8
10% NAOH(SODIUM HYDROXIDE)	10	TOLUENE	8
ETHANOL	8	BUTYL CELLUSOLVE	2
10%HNO3 (NITRIC ACID)	8	COFFEE	5
5% DMEA (DIMETHYL-ETHANOL - AMINE)	8	SKYDROL	4
MEK(METHYL ETHYL KETONE)	8	DOT 3 BRAKE FLUID	4
AROMATIC HYDROCARBON 100	9	GLYCOL ETHER DB	4
ACETIC ACID	3		
DBE (DIBASICESTERS)	6		

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.

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In the United States:
1.855.6.AXALTA
axalta.us/industrial

In Canada:
1.800.668.6945