



PRODUCT OVERVIEW

Advanced Industrial Coatings Metal Direct™ is a low VOC Acrylic Polyurethane that offers direct-to-metal adhesion. The AIC Metal Direct™ line offers 16 factory packaged colors that are durable, high gloss, chemical resistant, and offer direct-to-metal adhesion. This product line is ideal for industrial applications, machinery, and equipment. Metal Direct™ Acrylic Polyurethane offers excellent hiding and is free of lead and chromate hazards.



SURFACE PREPARATION

- Wash surfaces with a mild detergent in hot water. Rinse well and wipe dry with a clean cloth
- Solvent clean with an appropriate Surface Cleaner and wipe dry with a clean cloth
- Blast all metal areas (Preferred) or sand with 80 grit sand paper (sanding recommended for SMC and FRP)
- Solvent clean with an appropriate Surface Cleaner and wipe dry with a clean cloth



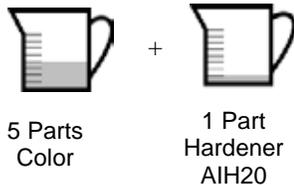
SUITABLE SUBSTRATES

- Blasted Cold Rolled Steel
- Blasted Hot Rolled Steel
- Sheet Molded Compound (SMC)
- Fiberglass Reinforced Plastic (FRP)

NOTE: Not for use on immersion services. Not for use on surfaces with extended surface temperatures of 250°F or more.



MIXING



5 Parts
Color

1 Part
Hardener
AIH20

Note: When using HVLP equipment only, up to 1 part AIR10 Reducer can be added to mix.



APPLICATION

1. HVLP: Adjust air pressure at cap to 8-10 psi for pressure feed applications with a fluid delivery of 16-22 ounces per minute. Apply 1 full wet coat with 50% overlap, then apply a second coat in a cross-coat method. Recommended dry film build is 4-8 mils.
2. Airless: Airless Delivery pressure between 2,500 – 3,500 psi. Pump up to 3,000 lbs fluid pressure. 1 full wet coat with 50% overlap, applying the second coat in a cross-coat method at an application distance of 12-18 inches. Recommended film build is 4-8 mils.

NOTE: Estimated coverage is 871 sq. ft per gallon per mil.

PERSONAL PROTECTION

- Read all label directions before use.
- Refer to MSDS for specific information.
- Wear a NIOSH approved organic vapor respirator when mixing and applying.
- Wear a NIOSH approved dust particulate mask when sanding.
- Wear safety glasses, coveralls, respirator, and latex gloves when using product.



PRODUCT DATA SHEET

SURFACE PREPARATION



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SUITABLE SUBSTRATES



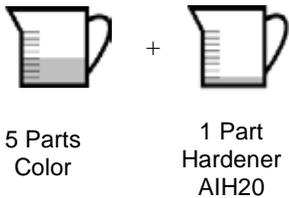
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MIXING



- Stir or shake AIC Metal Direct™ Acrylic Polyurethane thoroughly before mixing
- Mix by volume, 5 parts AIC Metal Direct™ Acrylic Polyurethane Color with 1 part AIH20 hardener. Stir thoroughly
- Pot Life: 2 Hours



Note: When using HVLP equipment only, add up to 1 part AIR10 Reducer

APPLICATION

Overall

1. HVLP: Adjust air pressure at cap to 8-10 psi for pressure feed applications with a fluid delivery of 16-22 ounces per minute. Apply 1 full wet coat with 50% overlap, then apply a second coat in a cross-coat method. Recommended film build is 4-8 mils.
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EQUIPMENT

Airless

Recommended Fluid Pressure	2500 – 3500 psi
Reversible Tip	3-13, 5-21
60 – 1 Pump	Up to 3,000 lbs fluid pressure
Filter	None

Note: Hose needs to maintain or exceed 6,000 psi. Please contact your ACME representative for proper recommendation.

<u>Gun Type</u>	<u>Nozzle</u>	<u>Air Pressure</u>
HVLP Pressure Feed	1.3 or 1.4 mm at 16-22 oz/min	8-10 psi at cap (use manufacturers recommendation)



PRODUCT DATA SHEET

DRYING SCHEDULE



Air dry times @ 8.0 mil wet @ 70° F, 50% Relative Humidity:

- Hand Slick: 45 Minutes
- Dust Free: 1 Hour
- Tack Free: 1.5 Hours
- Nib Sandable: 2 Hours
- Sandable: 3 Hours

Minimum Recoat Time: 20 minutes
Maximum Recoat Time: 72 hours

NOTE: In order to recoat after 72 hours, surface must be sanded with 220-320 grit sandpaper.

TECHNICAL DATA

Mixing Ratio by Volume	5:1	Physical Properties*	
Max VOC	2.49	Impact	80/60
Ready to Spray Volume Solids (White)	55%	Humidity	Pass
Coverage @ 1 mil dry (white)	882 sq ft per gal per mill	Salt Spray (500 hrs)	Pass
Pot Life	2 Hours	Dry Adhesion	Pass
Viscosity (sprayable) #3 Zahn Cup (ISO calibrated)	20 – 25 seconds	MEK R	50
Recommended Dry Film Thickness*	4-8 mils	Gloss	80 to 90

Note: Please contact your ACME® representative for higher film build recommendations.

AIC Metal Direct™ DTM	As Packaged		As Applied	
	Lb/Gal	G/L	Lb/Gal	G/L
Density	8.38	1003	8.68	1039
	% by Wt.	% by Vol.	% by Wt.	% by Vol.
Volatiles	50.3	59.1	47	54.3
Water	0	0	0	0
Exempt Compounds	25	29	26.7	29.2
	Lb/Gal	G/L	Lb/Gal	G/L
VOC Total	2.11	253	1.76	211
VOC Less Exempt	2.97	357	2.49	298
	Lb/Gal	KG/L	Lb/Gal	KG/L
HAPs	0.01	0.001	0	0.001

To learn more about ACME® Automotive Refinish Products, visit our Web site at www.sherwin-automotive.com