



Advanced Industrial Coatings

3.5 VOC Acrylic Enamel

PRODUCT OVERVIEW

Advanced Industrial Coatings 3.5 VOC Acrylic Enamel is a two-component acrylic enamel topcoat system for properly prepared and/or primed metal surfaces. Advanced Industrial Coatings is an easy-to-use, high gloss, durable, chemical and solvent resistant coating that can be air dried or force dried. The AIC™ K2 series is an intermix color system that is extremely versatile and cost effective. It is recommended for use on industrial applications that require good hiding and good sag-resistance. The 3.5 VOC acrylic enamel also has a 1K option if such properties are desired.



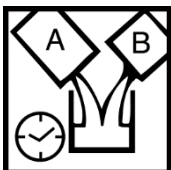
SUITABLE SUBSTRATES

- Cold rolled steel
- Hot rolled steel
- Fiberglass
- ABS & PC/ABS
- Aluminum

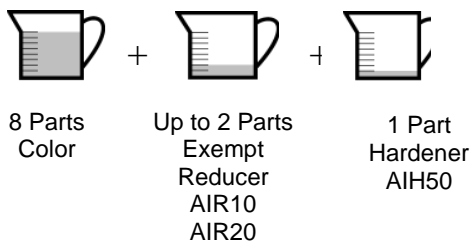
SUITABLE PRIMERS

- AIP 100 Series Primers
- AIP 200 Series Primers

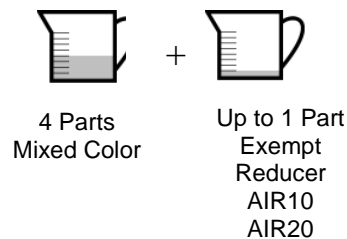
Note: AIC™ 3.5 Acrylic Enamel K2 Series can be applied directly to these substrates if surface preparation recommendations are followed.



MIXING



(Optional 1K Mix Ratio)



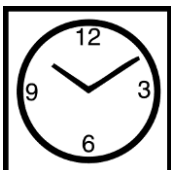
To speed dry time of the 2K product, add up to 6 ounces of the AIA200 accelerator per sprayable gallon.

To speed dry time of the 1K product, add up to 8 ounces of the AIC440 drier per sprayable gallon.



APPLICATION

1. HVLP: Adjust air pressure at cap to 8-10 psi.
2. Conventional: Adjust air pressure at the gun to 45-60 psi for pressure feed applications with a fluid delivery of 8-15 ounces per minute.
3. For Conventional Pressure Feed, apply 2 medium coats at a gun distance of 8-10 inches. Spray to hiding. For HVLP, apply 1 full wet coat with 50% overlap, applying the second coat in a cross-coat method. Recommended dry film thickness is 2.0-2.5 mils.
4. Clean spray gun immediately after use with Gun and Equipment Cleaner.



DRYING SCHEDULE

2K Mix Drying Schedule

Air Dry Times

Unaccelerated

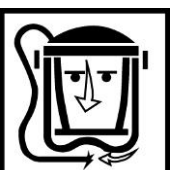
Nib Sandable:	1 hour
Dust Free:	1 hour
Tack Free:	2 hours
Tape Free:	3 hours
Sandable:	4-6 hours

NOTE: See Dry Schedule in Product Data Sheet for Force Dry information

(Optional 1K Mix Ratio)

Air Dry Times

Nib Sandable:	1 hour
Dust Free:	2 hours
Tack Free:	3 hours
Tape Free:	4 hours
Sandable:	8 hours



PERSONAL PROTECTION

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



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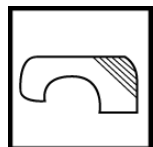
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PRODUCT DATA SHEET



SURFACE PREPARATION

- Wash surfaces with a mild detergent in hot water. Rinse well and wipe dry with a clean cloth.
- Solvent clean with the appropriate Low VOC Surface Cleaner and wipe dry with a clean cloth.
- If doing repair, grind repair area to remove paint and all rust as needed
- Sand all areas to be primed and featheredge all broken film areas. Then solvent clean with the appropriate cleaner.
- Prime with AIP primer.



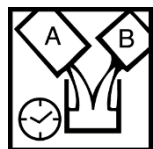
SUITABLE SUBSTRATES

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- ABS & PC/ABS
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Note: AIC™ 3.5 Acrylic Enamel K2 Series can be applied directly to these substrates if surface preparation recommendations are followed.

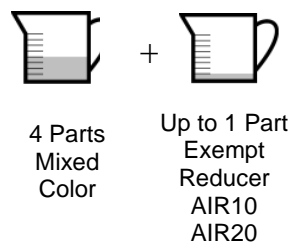
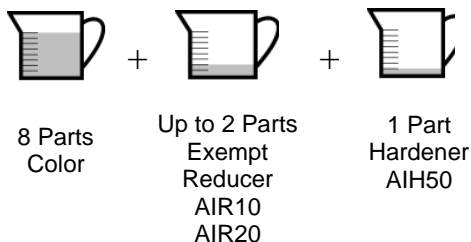
SUITABLE PRIMERS

- AIP 100 Series Primers
- AIP 200 Series Primers



MIXING

- Stir or shake AIC K2 series thoroughly before mixing.
- Mix by volume 8 parts AIC K2 series color, with up to 2 parts of AIR10 / AIR20 reducer and 1 part AIH50 hardener.
- Stir thoroughly and strain before use.
- Pot life: 4 hours at 70°F. With accelerator AIC440 / AIA200 pot life: 3 hours at 70°F.
- 1K option pot life: Extended pot life 7 days
- To speed dry time of the 1K product, add up to 8 ounces of the AIC440 drier per sprayable gallon.
- To speed dry time of the 2K product, add up to 6 ounces of the AIA200 accelerator per sprayable gallon.



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REDUCER	TEMPERATURE RANGE
AIR10	50-75°F
AIR20	75-90°F



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EQUIPMENT

Gun Type

Conventional Pressure Feed
HVLP Pressure Feed

Nozzle

0.8-1.4 mm at 8-15 oz/min
0.8-1.2 mm at 8-15 oz/min

Air Pressure

45-60 psi
8-10 psi at cap

RECOAT

- Recoat before 8 hours or after 48 hours to prevent lifting. AIC K2 series can be recoated with itself before 8 hours or after 48 hours and up to 14 days after initial application without sanding or scuffing. After 14 days, sand or scuff before recoating.

DRYING SCHEDULE

- Dry times are based on dry film thickness of 2.0-2.5 mils; thicker films will extend drying times.
- Air dry times at 75°F and 50% relative humidity.

Air Dry Times

Unaccelerated

Nib Sandable: 1 hour
Dust Free: 1 hour
Tack Free: 2 hours
Tape Free: 3 hours
Sandable: 4-6 hours

(Optional 1K Mix Ratio)

Air Dry Times

Nib Sandable: 1 hour
Dust Free: 2 hours
Tack Free: 3 hours
Tape Free: 4 hours
Sandable: 8 hours

Force Dry Times

<u>Temperature</u>	<u>Time to Tape Free</u>
140°F	80-120 minutes
160°F	60-80 minutes
180°F	45-60 minutes

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140°F	80-120 minutes
160°F	60-80 minutes
180°F	45-60 minutes

- To speed dry time of the 1K product, add up to 8 ounces of the AIC440 drier per sprayable gallon.
- To speed dry time of the 2K product, add up to 6 ounces of the AIA200 accelerator per sprayable gallon.

NOTES

- Decals may be applied after air-drying 72 hours at 75°F. Lower temperatures, heavy film thickness, poor air movement, thick decals, foil-based decals, etc., will extend the 72 hour dry time before decals may be applied.
- Infrared recommendation: 10 minutes on low for flash and 20 minutes on high until firm. Lamp should be no closer than 36 inches.

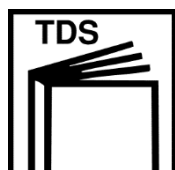


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TECHNICAL DATA



Mixing Ratio by Volume	8:2:1	Recommended Film Thickness	2.0-2.5 mils
Max VOC @ 8:2:1	3.5 lbs/gal	Hours of Xenon 1000	No Effect
Ready to Spray Volume Solids (White)	40 %	Salt Spray Resistance 250 hrs	1/8" creepage
Coverage @ 1 mil dry (white)	800 FT ² /gal	10% Sulfuric Acid	Slight Effect
Pot Life	4 hours at 70°F 3 hours at 70°F with accelerator	Humidity 100 hours	Slight Effect
Viscosity (sprayable) Gardener #2 Zahn Cup (ISO calibrated)	18-25 sec	Flexiblity (1/8" conical mandrel)	Excellent

K2 Series-with hardener	As Packaged		As Applied	
	Lb/Gal	G/L	Lb/Gal	G/L
Density	8.18	979	7.91	947
	% by Wt.	% by Vol.	% by Wt.	% by Vol.
Volatiles	47.6	55.6	55.4	63.4
Solids	52.4	44.4	44.6	36.6
Water	0	0	0	0
Exempt Compounds	10.9	13.3	23.4	27.9
	Lb/Gal	G/L	Lb/Gal	G/L
VOC Total	2.99	359	2.53	303
VOC Less Exempt	3.46	414	3.50	420
	Lb/Gal	KG/L	Lb/Gal	KG/L
HAPs	3.51	0.421	3.10	0.372

K2 Series-without hardener	As Packaged		As Applied	
	Lb/Gal	G/L	Lb/Gal	G/L
Density	8.18	979	7.86	941
	% by Wt.	% by Vol.	% by Wt.	% by Vol.
Volatiles	47.6	55.6	56.4	64.5
Solids	52.4	44.4	43.6	35.5
Water	0	0	0	0
Exempt Compounds	10.9	13.3	25.8	30.7
	Lb/Gal	G/L	Lb/Gal	G/L
VOC Total	2.99	359	2.39	287
VOC Less Exempt	3.46	414	3.46	414
	Lb/Gal	KG/L	Lb/Gal	KG/L
HAPs	3.51	0.421	3.51	0.149