

PRODUCT DESCRIPTION

Advanced Industrial Coatings 5.0 VOC Acrylic Enamel is a one-component acrylic enamel topcoat 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 K1 series is a free of lead and chromate hazards - intermix colors system. AIC K1 series is an extremely versatile, cost effective product and is recommended for use on industrial applications that require durability and good sag-resistance. K1 series has an optional hardener available if increased physical properties are desired.

TECHNICAL DATA

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|---|---|--------|-----|---------|-----|-----------------------|--------|-------------------|---------------|----------------------|---------------|----------|-----------|-----------|-----------|------------|--------|
| <ul style="list-style-type: none"> • 1K With AIR10 / AIR20@4 : 1 VOC Less Exempt 4.5 lbs/gal • HAP's <1.5 lbs/gal RTS • Viscosity (sprayable) Gardner #2 Zahn Cup (ISO calibrated) 18-25 sec • Flash point PMCC (white) 35°F • Coverage @ 1 mil dry (white) 800 sq. ft./gallon • Recommended dry film thickness (white) 2.0-2.5 mils • Volume Solids (white) 40% • Gloss 60° 88
20° 78 • DOI Very Good • Pencil Hardness at 48 hours at 2 weeks HB
H | <ul style="list-style-type: none"> • Performance after one-week air dry <ul style="list-style-type: none"> - Impact resistance (80 inch-pounds) <table border="0"> <tr> <td>Direct</td> <td>120</td> </tr> <tr> <td>Reverse</td> <td>120</td> </tr> </table> - Flexibility (1/8" conical mandrel) Pass - Solvent resistance (10 double rubs) (MEK/Xylene/Gasoline/Diesel/Oil) No effect - Chemical resistance (24 hr. covered contact) <table border="0"> <tr> <td>10% Hydrochloric acid</td> <td>Effect</td> </tr> <tr> <td>10% Sulfuric acid</td> <td>Slight effect</td> </tr> <tr> <td>10% Sodium hydroxide</td> <td>Slight effect</td> </tr> <tr> <td>Gasoline</td> <td>No effect</td> </tr> <tr> <td>Motor Oil</td> <td>No Effect</td> </tr> <tr> <td>Antifreeze</td> <td>Effect</td> </tr> </table> - Salt spray resistance -250 hrs* 1/8" creepage - Humidity resistance - 100 hours* Slight Haze <p>* Over properly treated and primed metal</p> | Direct | 120 | Reverse | 120 | 10% Hydrochloric acid | Effect | 10% Sulfuric acid | Slight effect | 10% Sodium hydroxide | Slight effect | Gasoline | No effect | Motor Oil | No Effect | Antifreeze | Effect |
| Direct | 120 | | | | | | | | | | | | | | | | |
| Reverse | 120 | | | | | | | | | | | | | | | | |
| 10% Hydrochloric acid | Effect | | | | | | | | | | | | | | | | |
| 10% Sulfuric acid | Slight effect | | | | | | | | | | | | | | | | |
| 10% Sodium hydroxide | Slight effect | | | | | | | | | | | | | | | | |
| Gasoline | No effect | | | | | | | | | | | | | | | | |
| Motor Oil | No Effect | | | | | | | | | | | | | | | | |
| Antifreeze | Effect | | | | | | | | | | | | | | | | |

SUITABLE PRIMERS

- All Advanced Industrial Coatings Primers / Sealers / Epoxy Primers
- AIP100 White Epoxy Primer
- AIP101 Black Epoxy Primer
- AIP102 Gray Epoxy Primer
- AIP103 Red Oxide Epoxy Primer
- AIP200 White Urethane Primer
- AIP201 Black Urethane Primer
- AIP202 Gray Urethane Primer

MIXING

1. Stir or shake AIC K1 series thoroughly before mixing.
2. **1K** - Mix by volume, **4 parts AIC 1K Color with up to 1 part of AIR10 / AIR20 reducers.**
Unlimited Pot life. Stir thoroughly and strain before use.

(Optional Hardener Mix)



Note:

K1 series has an optional hardener available if increased physical properties are desired (AIH50) mix 8 parts color 2 parts reducer and 1 part hardener. Pot life with hardener is 4 to 6 hours.

3. To speed cure time of the **1K product**, add up to **8 ounces of AIC440** drier per sprayable gallon. To speed cure time of the **2K product**, add up to **8 ounces of AIA200** accelerator per sprayable gallon. Refer to **Drying Schedule** section for details about cure times with AIC Drier AIC440/AIA200.

Advanced Industrial Coatings

5.0 VOC Acrylic Enamel
Product Data Sheet
K1 Series

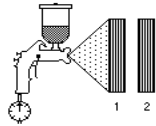
APPLICATION

Overall

1. Adjust air pressure at the gun to 55-65 psi Conventional Pressure Feed (adjust pot pressure to 8-15 fluid ounces per minute delivery).
2. 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.
3. Clean spray gun immediately after use with Gun and Equipment Cleaner.

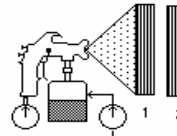
HVLP

Apply 1 full wet coat
With 50% overlap.



Conventional Pressure Feed

Apply 2 medium coats.
Allow each to become hand slick



Equipment

Fluid Tip
Fluid Delivery
Atomizing Air

HVLP

1.4 - 1.5 mm
8-15 oz./min.
8-10 psi @ Tip
Apply 1 full wet coat with 50% overlap
Using a cross-coat technique

Conventional Pressure Feed

.070/1.8 mm
8-15 oz./min.
55 - 65 psi @ Gun
Apply 2 medium coats

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 @ 75°F and 50% Relative Humidity:

	<u>Unaccelerated</u>	<u>Accelerated</u> Up to 8 oz. AIC440/AIA200 per sprayable gal
- Dust free	2 hours	1 hour
- Tack free	3 hours	2 hours
- Tape free	4 hours	3 hours
- Nib Sand	8 hours	4 hours

Force dry times:

<u>Temperature</u>	<u>Tape Free</u> <u>Unaccelerated</u>	<u>Tape Free with 8 oz.</u> <u>AIC440/AIA200 per sprayable gal</u>
140°F	80-120 minutes	60 minutes
160°F	60-80 minutes	45 minutes
180°F	45-60 minutes	30 minutes

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 min. on low for flash and 20 min. on high until firm. Lamp should be no closer than 36 inches.
- Recoat before 8 hours or after 48 hours to prevent lifting. AIC K1 can be recoated with itself before 8 hours or after 48 hours and up to 2 weeks after initial application. After 2 weeks sanding is required.

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.

To learn more about Advanced Industrial Coatings Products, call 1-888-813-2263.

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