AIC

Advanced Industrial Coatings

3.5 VOC Acrylic Enamel
Product Data Sheet
K2 Series

PRODUCT DESCRIPTION

Advanced Industrial Coatings 3.5 VOC Acrylic Enamel K2 series is a single component acrylic enamel topcoat system. 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 a free of lead and chromate hazards solid intermix color system. AIC K2 series is an extremely versatile, cost effective product and is recommended for use on industrial applications that require good hiding and good sag-resistance.

TECHNICAL DATA

- **Max VOC**
  with AIR10 / AIR20 @ 4:1 ratio — 3.5 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 — HB
  at 2 weeks — H

- **Performance after one-week air dry**
  - Impact resistance (80 inch-pounds)
    Direct — 120
    Reverse — 120
  - Flexibility (1/8" conical mandrel) — Pass
  - Solvent resistance (10 double rubs)
    (MEK/Xylene/Gasoline/Diesel/Oil) — No effect
  - Chemical resistance (24 hr. covered contact)
    10% Hydrochloric acid — Effect
    10% Sulfuric acid — Slight effect
    10% Sodium hydroxide — Slight effect
    Gasoline — No effect
    Motor Oil — No Effect
    Antifreeze — Effect
  - Salt spray resistance -250 hrs* — 1/8" creepage
  - Humidity resistance - 100 hours* — Slight Haze

  * Over properly treated and primed metal

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

MIXING

1. Stir or shake AIC K2 series thoroughly before mixing.
2. Mix by volume, **8 parts AIC K2 series color, with up to 2 parts of AIR10 / AIR20 reducers, 1 part AIH50 hardener.**
3. Stir thoroughly and strain before use.

- **Pot life: 4 hours @ 70°F.**
- **Pot life: 3 hours @ 70°F. with Accelerator AIC440.**

4 parts
Mixed
Color

+

Up to 1 part
Exempt
Reducer
AIR10 / AIR20

Note:
K2 series has an optional hardener available if increased physical properties are desired (AIH50) mix 8 part color 2 part reducer and 1 part hardener.

4. To speed cure time add up to 3 ounces of AIC440 Drier per sprayable gallon.
   Refer to **Drying Schedule** section for details about cure times with AIC Drier AIC440.

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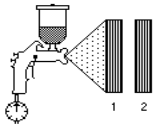
APPLICATION

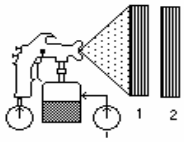
Overall

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

	HVLP	Conventional Pressure Feed
Fluid Tip	1.4 –1.5 mm	0.70/1.8 mm
Fluid Delivery	8-15 oz./min.	8-15 oz./min.
Atomizing Air	8–10 psi @ Tip	55 - 65 psi @ Gun
	Apply 1 full wet coat with 50% overlap Using a cross-coat technique	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:

	Unaccelerated	Accelerated Up to 3 oz. AIC440 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:

Temperature	Tape Free Unaccelerated	Tape Free with 3 oz. AIC440 per sprayable gal
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.
- Infra-Red 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 K2 series 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.