# **Advanced Industrial Coatings**



2K Acrylic Urethane Product Data Sheet **K3 Series 3.5 VOC** 

## PRODUCT DESCRIPTION

Advanced Industrial Coatings K3 series is a low VOC, two component acrylic urethane topcoat. Advanced Industrial Coatings is an easy-to-use, high gloss, extremely durable, chemical and solvent resistant acrylic urethane topcoat that is available in lead free colors. It is an extremely versatile, cost effective product and is recommended for use on industrial applications that require durability and sag-resistance.

# **TECHNICAL DATA**

•	Max VOC With AIH35 & AIR10 / AIR20 Less Exempt 3.5
	lbs/gal

HAP's
 <0.15 lbs/gal RTS</li>

Viscosity (sprayable)
 Gardner #2 Zahn Cup (ISO calibrated)
 18-25 sec

• Flash point PMCC (white) 30°F

• Coverage @ 1 mil dry (white) 840 sq. ft./gallon

• Recommended dry film thickness (White) 2.0-2.5 mils

Volume Solids (white)
 Gloss 60°
 20°
 85

• DOI Excellent

Pencil Hardness at 48 hours
 at 2 weeks
 HB

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 Slight effect
10% Sulfuric acid Slight effect
10% Sodium hydroxide No effect

Gasoline No effect
Motor Oil No Effect
Antifreeze No effect
- Salt spray resistance - 250 hrs\* No effect
- Humidity resistance - 100 hours\* No effect

\* 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 K3 series 3.5 VOC thoroughly before mixing.
- Mix by volume, 3 parts AIC K3 series Color with 1 part AIR 10 / AIR20 and 1 part AIH35 (3.5 VOC Hardener). Stir thoroughly and strain before use.
  - Pot life: 5 hours @ 70°F.
  - Pot life: 4 hours @ 70°F, with Accelerator AIA200.
- To speed cure time add up to 3 ounces of AIA200 Accelerator per sprayable gallon.
   Refer to Drying Schedule section for details about cure times with AIC Accelerator AIA200.

Note

To increase solids, hiding, viscosity, hold the AIR10 / AIR20 reducer and mix 3 parts of AIC color with 1 part of AIH35.



# **Advanced Industrial Coatings**

2K Acrylic Urethane **Product Data Sheet** K3 Series 3.5 VOC

## APPLICATION

#### Overall

- 1. Adjust air pressure at the gun to 55-65 psi for Conventional Pressure Feed (adjust pot pressure to 8-15 fluid ounces per minute delivery).
- 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 2. with 50% overlap, applying the second coat in a cross-coat method. Recommended dry film thickness is 2.0-2.5 mils.
- Clean spray gun immediately after use with Gun and Equipment Cleaner.

#### **HVLP** Apply 1 full wet coat With 50% overlap.



#### Equipment

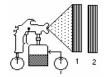
Fluid Tip Fluid Delivery Atomizing Air

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

# Pressure Feed/Siphon Feed

Apply 2 medium coats. Allow each to become hand slick



#### Conventional Pressure Feed

0.70/1.8 mm 8-15 oz./min. 55 - 65 psi @ Gun Apply 2 medium coats

# DRYING SCHEDULE

Dry times are based on a dry film thickness of 2.0 - 2.5 mils; thicker films will extend drying times.

Air dry times @ 75°F and 50% Relative Humidity:

		Accelerated	
		1 oz. AIA200	Accelerated
	<u>Unaccelerated</u>	<u>per sprayable gal</u>	3 oz. AIA200 per sprayable gal
<ul> <li>Dust free</li> </ul>	1-2 hours	1 hour	40 minutes
<ul> <li>Tack free</li> </ul>	4-5 hours	3 hours	2 hours
<ul> <li>Tape free</li> </ul>	12 hours	4 hours	3 hours
- Nib Sand	12+ hours	5 hours	4 hours

### Force dry times:

	Tape Free	Tape Free with 1 oz	Tape Free with 2 oz.
<b>Temperature</b>	Unaccelerated	AIA200 per sprayable Gallon	AIA200 per sprayable gallon
140°F	80-120 minutes	60 minutes	30 minutes
160°F	60-80 minutes	30 minutes	20 minutes
180°F	45-60 minutes	20 minutes	20 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.
- AIC K3 series 3.5 VOC can be recoated with itself after 15 minutes and up to 5 days without sanding. After 5 days sanding is required when recoating.

#### PERSONALPROTECTION

- 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.