

## Protective Coatings Made Better with Kynar Aquatec® CRX

Protect your high value assets from damaging ultraviolet radiation and weathering exposure. When other topcoats wither and fade, Kynar Aquatec® Resin-Based Coatings thrive in extreme environments.

Protective Coatings with Kynar Aquatec® latex can be formulated to meet:SSPC Paint 36, AWWA D102-17, IEEE Std C57.12.28

### Anti-Corrosion Coating Systems Evaluated

#### System 1: Commercial Anti-Corrosion Coating System- Control

- 1st Layer: Zinc rich epoxy or Zinc-epoxy primer with conductive (CNT)
- 2nd Layer: Epoxy coating mid-layer
- 3rd Layer: Polyurethane Topcoat (2K)
- **Expected system lifetime: 7 – 20 years, climate dependent**

#### System 2: PVDF-Acrylic Hybrid Anti-Corrosion Coating System

- 1st Layer: Zinc rich epoxy primer or Zinc-epoxy primer with conductive (CNT)
- 2nd Layer: Epoxy coating mid-layer
- 3rd Layer: Kynar Aquatec® CRX Topcoat (2K)
- **Expected system lifetime: +20 years**

### Protective Coating Formulated with Kynar Aquatec® CRX: General Properties

PROPERTY	TESTING PROTOCOL	TEST SUMMARY	PROTECTIVE COATING FORMULATED WITH KYNAR AQUATEC® CRX
<b>Chemical resistance</b>	ASTM D5402 SOLVENT (MEK) RESISTANCE:	No topcoat visible on a test cloth saturated with MEK after four sets of 25 double-rubs	Pass
<b>Accelerated weathering</b>	ASTM D4587	Level 3A: 3000 hrs, 375hr Cycles Color Change < 2.0 ΔE & 25% gloss from original reading	Pass
<b>Chalking resistance</b>	ASTM D4214	Maximum chalking level of 6 using Reference Photograph No. 1	Pass
<b>Impact resistance</b>	ASTM D2794	Direct Impact Strength 4.2 kilograms of force per square centimeter [kgf/cm <sup>2</sup> ] (or 60 pounds of force per square inch [in-lb] in U.S. units)	Pass
<b>Paint stability</b>	ASTM D1849	<10 Krebs Units after 30 days at 52 ± 1 degrees C° (126 ± 2 degrees F)	Pass

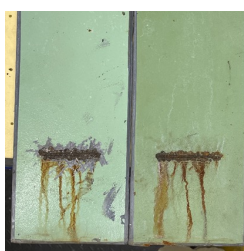
# Protective Coating made with Kynar Aquatec® CRX vs. Competitive Resins General Chemical Resistance

TEST SUMMARY	PROTECTIVE COATING FORMULATED WITH KYNAR AQUATEC® CRX	COMPETITIVE PRODUCT 1- PREMIUM POLYURETHANE	COMPETITIVE PRODUCT 2- POLYSILOXANE
1 hour immersion at 25°C (77 °F)			
100% (Wt.) Toluene	No change	Not tested	Fail
100% (Wt.) Methanol	No change	No change	Fail
100% (Wt.) Gasoline	No change	No change	No change
16 hour Spot at 25°C (77 °F)			
10% (Wt.) Nitric Acid	Slight yellowing	Slight yellowing	Slight yellowing
10% (Wt.) Hydrochloric Acid	No change	No change	Slight yellowing
10% (Wt.) Sodim Hydroxide	Brown discoloration	Yellow discoloration	Fail

## ISO 12944-9 cyclic testing for 1440 hrs (QUVA + salt fog + freezer) Both Panels tested with Premier CNT/Zn primer (70% solids) (100um dry, 6mils wet)

### System 1 Commercial PU Topcoat 1 ct. @ 4.0 mils dft

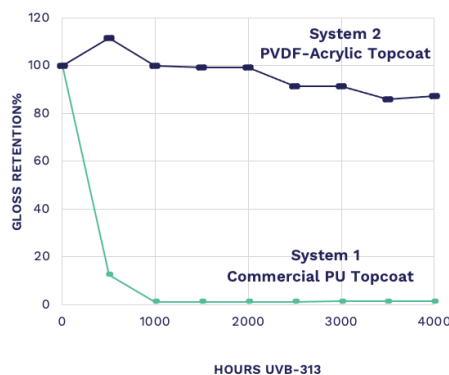
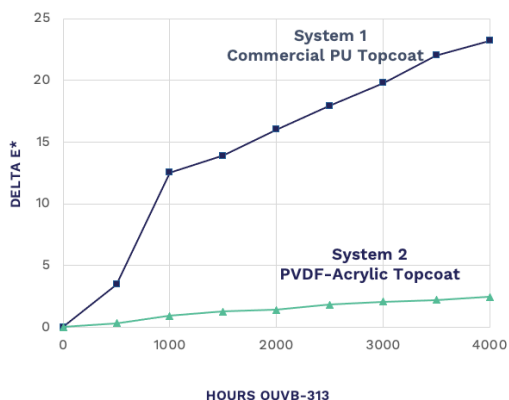
- Minimal scribe creep @ 2.8 mm
- Improved primer performance
- Loss of topcoat integrity (Chalking)
- Exposure of underlying primer (gray)
- Created weak points for corrosion



### System 2 Kynar Aquatec® CRX Topcoat 1ct. @ 3.0 mil dft

- Improvement in scribe creep @ 1.6mm
- Outstanding primer performance
- Maintained topcoat integrity
- No blistering or pitting

## Exceptional Weathering Performance for Kynar Aquatec® CRX Topcoat



\*Expose test panels per ASTM D4587 @ UV-313

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