

Environmentally Friendly High Performance Anti-Corrosion Coatings

Conductive polymers can be used as corrosion inhibitors was stated in 2000 Nobel Chemistry Award. In the past couple decades, many companies have tried to use conductive polymer as anti-corrosion pigments, recently **AnCatt** utilized new concept combining with our unique conducting polymer dispersion eventually brought this dream into reality. Our **Anti-Corrosion Coating Technology** does not employ convention toxic / carcinogenic heavy-metal pigments while providing superior corrosion protections for metals including aluminum. Our coating technology features:

Heavy-Duty Anti-Corrosion Protections:

5,000 hours of Salt Fog and Cyclic Weathering tests with no rusting or blistering, and > 1mm of undercutting. Also, the panels had no visible changes in appearance, including cracking, flaking, and chalking.

Environmentally Friendly: The primer contains no heavy-metal pigments such as Zinc, Chromate, or Lead

Very Good Adhesion: Tensile adhesion (pull-off strength) was 700-800 psi on samples

Protect Many Metals besides Iron/steel, for example, Zinc, Aluminum, Copper, Silver, etc

Scratch and Pinhole Tolerant

Surface Tolerant

Two-Component aliphatic urethane is used as the topcoat resin that provides

- Exceptional gloss retention
- Excellent abrasion resistance
- Excellent chemical resistance

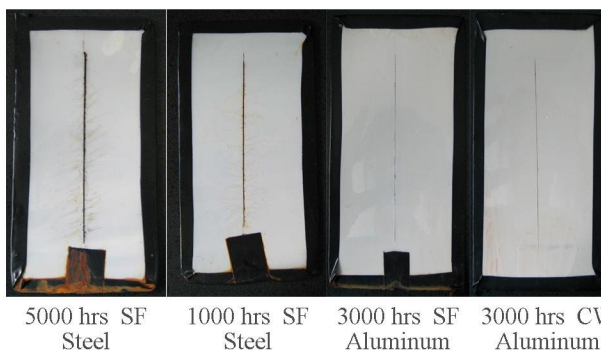
Light Weight

Low Raw Materials Costs

Easy to Manufacture

Salt Fog (SF) and Cyclic Weathering (CW) Test Results

Test	Hours	Metal	Blister	Rust-ing	Under-cutting
SF	5,000	Steel	10	10	<1mm
SF	3,000	Aluminum	10	10	<1-1mm
CW	5,000	Steel	10	10	4mm
CW	3,000	Aluminum	10	10	0-1mm



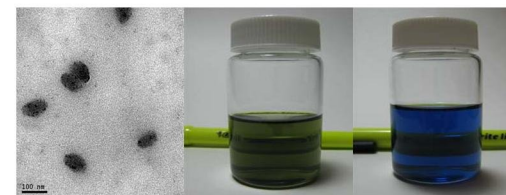
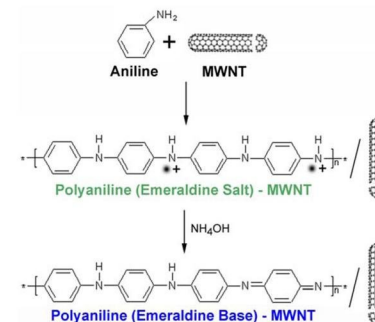
TDS	Part A							Part B
	Color	Solid Content	Thickness (µm)	Coverage (g/m ²)	Surface Drying (hrs)	Drying Time (hrs)	Shelf Life (month)	Mixing Ratio A/B
Primer	Light Blue	~50 %	~4 0	180	0.5	4	6-9	1/0.65
Inter-Layer	White /Ivory	~79 %	~1 00	250	2	16	6-9	1/0.16
Top Coat	Many	~83 %	~1 00	240	3	16	6-9	1/0.15

Adhesion Test Results

Adhesion: **700—800 psi**
(>= 200 psi considered as good)

Conductive Polymer Nanodispersion Technology

AnCatt also provides **Conductive Polymer Nanoparticle Dispersion Technology**. Our conducting polymer nanocomposites are easy to be processed (soluble and extrudable), and the dispersed conductive polymer particles are in consistent spindle shapes proximately 100 nm long and 50 nm wide. Our nanoparticle dispersion technology enables large-scale commercialization of conductive polymer applications that have long been anticipated, such as anti-corrosion primers, electrostatic dissipation coatings, electromagnetic interference shielding, static resistant fibers, conductive inks, conductive toners, conductive adhesives, conductive textiles, etc.



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