



ENVIROCRON® 04 HTE Powder Coat

Polyester HAA Ultra Durable

PCST99142 - Black Satin

POWDER COATING

Technical Data Sheet

Highlights

PPG’s Enviracryl™ and Envirocron™ Powder Coatings are aesthetically pleasing, produce a durable uniform finish and can be custom formulated with finishes from high gloss to low gloss, and in a variety of textures.

PPG’s “World Class” High Transfer Efficiency Powder Coatings provide a combination of good physical and chemical resistance properties. This extensive line of HTE Powders is engineered to meet the increasing requirement demands of the industrial wire and complex metal surface markets. They are available in both standard durable and ultradurable formulations with a first-pass transfer efficiency rate of 85% or better resulting in superior application build rates. These sophisticated Powders are the solution to your durability and physical property requirements. An unsurpassed application development program enables consistently friendly use on a variety of substrates.

- Available in a wide range of colors and glosses
- Excellent exterior durability
- Good chemical resistance



PRODUCT APPROVALS

Specifically formulated to meet the requirements of AAMA 2604.

PRODUCT CHARACTERISTICS

Excellent mar and scratch resistance

TEST CONDITIONS

Property	Test method	Value
Substrate		Pretreated aluminum panels
Recommended Thickness	ASTM D 7091	2.0 - 3.0 mils
Curing Conditions	Metal Temperature	10 min @ 400 °F

For chemical resistance, Pass = No color change, no loss of adhesion, no blistering or no visual appearance change.

PRODUCT PROPERTIES

Property	Test method	Value
Appearance	Visual Inspection	Smooth
Gloss 60°	ASTM D 523	25 - 35
Adhesion	ASTM D 3359	Dry: 100% (5B Pass) Wet: 100% (5B Pass) Boiling Water: 100% (5B Pass)
Hardness	ASTM D 3363	2H Pencil (Eagle)
Impact - Direct	ASTM D 2794	100 in-lbs - No flaking
Conical Mandrel	ASTM D 522	1/8" Mandrel - No flaking
Chemical Resistance		
Nitric Acid	30 minute vapor test	Pass
Muriatic Acid	15 minute spot test	Pass
Mortar	24 hour pat test	Pass
Detergent Immersion	38C for 72 hours	Pass
Window Cleaner	10 drops for 24 hours	Pass
Salt spray	ASTM B 117	3000 hrs Blister rating - 8 minimum Scribe rating - 7 minimum
Humidity	ASTM D 1735	3000 hrs Blister rating - 8 minimum



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Property	Test method	Value
Exterior Weathering		
EMMAQUA NTW	Minimum 1450 MJ	
South Florida Exposure	Minimum 5 Years	
Chalk resistance	ASTM D 4214A	Pass - No more than 8
Gloss Retention	ASTM D 523	Pass - Minimum 30%
Color Retention	ASTM D 2244	Pass - < 5.0 DE
Resistance to Errosion	ASTM B 244	Pass - Less than 10% film loss
Specific gravity	Calculated	1.64 ± .05
Theoretical coverage	Calculated	117 ft²/lbs at 1.0 mil 24 m²/kg at 25 µm



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CURING WINDOW* (object temperature)

See Cure Curve PCS-002

- 20 min @ 340 °F (171 °C)
- 15 min @ 350 °F (177 °C)
- 10 min @ 400 °F (204 °C)

*Temperature and time to be adjusted to accomplish proper curing of coating. This can be achieved using infrared, convection, or combination ovens.

STORAGE STABILITY

24 months at 77 °F maximum

Materials need to be stored in sealed plastic bags under dry and cool conditions. Do not expose to sunlight.

PPG recommends that all material be used in FIFO order (first in - first out). Materials that exceed the recommended shelf life should be tested prior to use.

SUBSTRATE PREPARATION

Surface preparation should be chosen according to the type of substrate and required performance. The coater should test the suitability of the surface preparation before the application using appropriate test methods.

APPLICATION RECOMMENDATIONS

- Electrostatic Spray
- Coating can be applied with automatic and manual devices.
- Substrate should be correctly cleaned before use.
- Do not mix this product with other powder coatings.
- Color and finish influenced by film thickness: a good control of the film thickness will help the consistency of the aspect.

HEALTH AND SAFETY

For comprehensive Health, Safety, and Environmental advice, please refer to the relevant Safety Data Sheets, and information printed on the product label.

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