



ENVIROCRON® 04 HTE Powder Coat

Polyester HAA Ultra Durable
PCST99166 - Black Matte Texture

POWDER COATING

Technical Data Sheet

Highlights

PPG's Envirocyl™ 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
- Good chemical resistance



PRODUCT APPROVALS

Specifically formulated to meet the requirements of AAMA 2604.

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	Texture
Gloss 60°	ASTM D 523	3.0 - 6.0
Adhesion	ASTM D 3359	100% (5B Pass)
Hardness	ASTM D 3363	2H Pencil (Eagle)
Impact - Direct	ASTM D 2794	80 in-lbs - No flaking
Impact - Reverse	ASTM D 2794	60 in-lbs - No flaking
Conical Mandrel	ASTM D 522	1/4" Mandrel - No flaking
Chemical Resistance		
Mortar	24 hour pat test	Pass
Nitric Acid	30 minute vapor test	Pass
Muriatic Acid	15 minute spot test	Pass
Window Cleaner	10 drops for 24 hours	Pass
Detergent Immersion	38C for 72 hours	Pass
Salt spray	ASTM B 117	3000 hrs
Humidity	ASTM D 4585 @ 38° C	100 hrs <1/16" scribe creep No blisters
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 - No more than 8
Color Retention	ASTM D 2244	Pass - < 5.0 DE
Resistance to Errosion	ASTM B 244	Pass - Less than 10% film loss



ENVIROCRON® 04 HTE Powder Coat

Polyester HAA Ultra Durable
PCST99166 - Black Matte Texture

POWDER COATING

Technical Data Sheet

Property	Test method	Value
Specific gravity	Calculated	1.68 ± .05
Theoretical coverage	Calculated	114 ft ² /lbs at 1.0 mil 23.4 m ² /kg at 25 μm



ENVIROCRON® 04 HTE Powder Coat

Polyester HAA Ultra Durable
PCST99166 - Black Matte Texture

POWDER COATING

Technical Data Sheet

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.

* Statements and methods described herein are based upon the best information and practices known to PPG Industries, Inc. ("PPG"). Any statements or methods mentioned herein are general suggestions only and are not to be construed as representations or warranties as to safety, performance, or results. Since the suitability and performance of the product is highly dependent on the product user's processes, operations, and numerous other user-determined conditions, the user is solely responsible for, and assumes all responsibility, risk and liability arising from, the determination of whether the product is suitable for the user's purposes, including without limitation substrate, application process, pasteurization and/or processing, and end use. No testing, suggestions or data offered by PPG to the user shall relieve the user of this responsibility. PPG does not warrant freedom from patent infringement in the use of any formula or process set forth herein. Continuous improvements in coatings technology may cause future technical data to vary from what is in this bulletin. Contact your PPG representative for the most up to date information.

www.ppg.com/industrialcoatings and powdercoatings.ppg.com