



ENVIROCRON® 04 Powder Coat

Polyester HAA Ultra Durable

PCST89137 - Bone White

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" Ultradurable Polyester Powder Coatings provide a combination of good physical and chemical resistance properties with excellent resistance to outdoor weathering. This extensive line of Polyester Powders is manufactured to meet the increasing requirement demands of the automotive and industrial markets. These sophisticated Polyesters are the solution to your smoothness, low-bake, 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.

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 | 26 - 34 |
| 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 | 60 in-lbs |
| Impact - Reverse | ASTM D 2794 | 40 in-lbs |
| Conical Mandrel | ASTM D 522 | 1/8" Mandrel |
| Chemical Resistance | | |
| Nitric Acid | 30 minute vapor test | Pass |
| Muriatic Acid | 15 minute spot test | Pass |
| Detergent Immersion | 38C for 72 hours | Pass |
| Window Cleaner | 10 drops for 24 hours | Pass |
| Mortar | 24 hour pat test | Pass |
| Salt spray | ASTM B 117 | 3000 hrs Blister rating - 8 minimum Scribe rating - 7 minimum |
| Humidity | ASTM D 4585 @ 38° C | 3000 hrs Blister rating - 8 minimum |





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|------------------------|-----------------|---|
| Exterior Weathering | | |
| South Florida Exposure | Minimum 5 Years | |
| EMMAQUA NTW | Minimum 1450 MJ | |
| 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 | 1.55 ± .05 |
| Theoretical coverage | Calculated | 124 ft ² /lbs at 1.0 mil 25.4 m ² /kg at 25 μm |



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CURING WINDOW* (object temperature)

See Cure Curve PCS-012

15-24 min @ 340 °F (171 °C)

10-22 min @ 350 °F (177 °C)

5-10 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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