



POWDER COATING

Technical Data Sheet

Highlights

A new, innovative patented addition to PPG’s world-class fluoropolymer powder coatings for architectural aluminum extrusions. Coraflon® Platinum Powder Coat is a one-coat FEVE-based fluoropolymer that fully meets and exceeds AAMA 2605 specifications in all colors. Coraflon Platinum is the first high transfer efficiency fluoropolymer powder in the industry, offering first-pass transfer efficiency rate of 85% or better resulting in superior application build rates on aluminum extrusions. Coraflon Platinum Powder is available in a wide range of colors, glosses, surface effects, micas and bonded metallics.



PRODUCT APPROVALS

Specifically formulated to meet the requirements of AAMA 2605.

PRODUCT CHARACTERISTICS

- Extended gloss range (5-85%)
- 20%+ higher transfer efficiency
- Improved corrosion performance
- Formulated without the use of TGIC, BPA, or PFOA’s

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 | 20 - 35 |
| Adhesion | ASTM D 3359 | Dry: 100% (5B Pass) Wet: 100% (5B Pass) Boiling Water: 100% (5B Pass) |
| Hardness | ASTM D 3363 | H Pencil Minimum (Eagle) |
| Impact - Direct | ASTM D 2794 | Min. 3 mm deformation - tape pull no removal |
| Chemical Resistance | | |
| Nitric Acid | 30 minute vapor test | Pass |
| Muriatic Acid | 15 minute spot test | Pass |
| Window Cleaner | 10 drops for 24 hours | Pass |
| Mortar | 24 hour pat test | Pass |
| Detergent Immersion | 38C for 72 hours | Pass |
| Humidity | ASTM D 4585 @ 38° C | 4000 hrs Blister rating - 8 minimum |
| Cyclic Corrosion | ASTM G 85, Annex A5 | 4000 hrs Blister rating - 8 minimum Scribe rating - 7 minimum |



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| Property | Test method | Value |
|------------------------|------------------|---|
| Exterior Weathering | | |
| EMMAQUA NTW | Minimum 10 Years | |
| South Florida Exposure | Minimum 2900 MJ | |
| Chalk resistance | ASTM D 4214A | Pass - No more than 8 |
| Gloss Retention | ASTM D 523 | Pass - Minimum 50% |
| Color Retention | ASTM D 2244 | Pass - < 5.0 DE |
| Resistance to Errosion | ASTM B 244 | Pass - Less than 10% film loss |
| Specific gravity | Calculated | 1.57 ± .05 |
| Theoretical coverage | Calculated | 122 ft²/lbs at 1.0 mil 25.1 m²/kg at 25 µm |



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CURING WINDOW* (object temperature)

See Cure Curve PCN-001

- 20 min @ 370 °F (188 °C)
- 15 min @ 380 °F (193 °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

12 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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