



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” Polyester Powder Coatings provide a combination of good physical and chemical resistance properties. This extensive line of Polyester Powders is manufactured to meet the increasing requirement demands of the appliance 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
- Exterior durability
- Good chemical resistance



PRODUCT APPROVALS

UL Approved

TEST CONDITIONS

| Property              | Test method       | Value                   |
|-----------------------|-------------------|-------------------------|
| Substrate             |                   | Pretreated steel panels |
| Recommended Thickness | ASTM D 7091       | 2.0 - 3.0 mils          |
| Curing Conditions     | Metal Temperature | 10 min @ 340 °F         |

PRODUCT PROPERTIES

| Property             | Test method         | Value                                         |
|----------------------|---------------------|-----------------------------------------------|
| Appearance           | Visual Inspection   | Smooth                                        |
| Gloss 60°            | ASTM D 523          | 85 Minimum                                    |
| Smoothness           | PCI #               | 4-7                                           |
| Adhesion             | ASTM D 3359         | 100% (5B Pass)                                |
| Hardness             | ASTM D 3363         | 2H Pencil (Eagle)                             |
| Impact - Direct      | ASTM D 2794         | 160 in-lbs                                    |
| Impact - Reverse     | ASTM D 2794         | 160 in-lbs                                    |
| Conical Mandrel      | ASTM D 522          | 1/8" Mandrel - No cracking                    |
| Salt spray           | ASTM B 117          | 1000 hrs                                      |
| Humidity             | ASTM D 4585 @ 38° C | 100 °F, 100% RH - 1000+ hrs                   |
| Specific gravity     | Calculated          | 1.59 ± .05                                    |
| Theoretical coverage | Calculated          | 121 ft²/lbs at 1.0 mil<br>24.8 m²/kg at 25 µm |



POWDER COATING

Technical Data Sheet

CURING WINDOW\* (object temperature)

See Cure Curve PCT-049

- 15-25 min @ 300 °F (149 °C)
- 6-20 min @ 360 °F (182 °C)
- 3-8 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.