



## 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" Epoxy Powder Coatings provide a combination of good physical and chemical resistance properties. This extensive line of Epoxy Powders is manufactured to meet the increasing requirement demands of the automotive and industrial markets. These sophisticated Epoxies 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
- Good chemical resistance

### 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 @ 400 °F

### PRODUCT PROPERTIES

Property	Test method	Value
Appearance	Visual Inspection	Smooth
Gloss 60°	Visual Inspection	25 - 35
Adhesion	ASTM D 3359	100% (5B Pass)
Hardness	ASTM D 3363	2H Pencil
Impact - Direct	ASTM D 2794	80 in-lbs - No flaking
Impact - Reverse	ASTM D 2794	80 in-lbs - No flaking
Conical Mandrel	ASTM D 522	1/8" Mandrel - No flaking
Salt spray	ASTM B 117	1000 hrs
Humidity	ASTM D 4585 @ 38° C	100 °F, 100% RH - 1000+ hrs
Specific gravity	Calculated	1.58 ± .05
Theoretical coverage	Calculated	122 ft <sup>2</sup> /lbs at 1.0 mil 24.9 m <sup>2</sup> /kg at 25 µm





## POWDER COATING

## Technical Data Sheet

### CURING WINDOW\* (object temperature)

See Cure Curve PCM-029

18-30 min @ 340 °F (171 °C)

7-19 min @ 370 °F (188 °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

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.

\* 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](http://www.ppg.com) & [www.ppgindustrialcoatings.com](http://www.ppgindustrialcoatings.com) & [powder@ppg.com](mailto:powder@ppg.com)