



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.

- Excellent corrosion resistance
- Fortified with corrosion inhibitor

PRODUCT APPROVALS

Compliant to ISO 12944-6 C5-M High requirements over 2-3 mil profile blasted cold rolled steel and top coated with an appropriate polyester powder coating

PRODUCT CHARACTERISTICS

Semi-conductive to help with acceptance of electrostatically applied topcoat

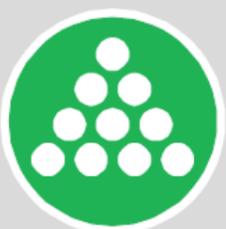
TEST CONDITIONS

Property	Test method	Value
Substrate		Pretreated steel panels
Recommended Thickness	ASTM D 7091	1.5 - 2.5 mils
Curing Conditions	Metal Temperature	10 min @ 340 °F

Also tested were iron phosphate treated CRS(cold rolled steel). Zirconium oxide treated CRS and Sa2.5 grit blasted HRS.

PRODUCT PROPERTIES

Property	Test method	Value
Appearance	Visual Inspection	Smooth
Gloss 60°	ASTM D 523	10 Maximum
Adhesion	ASTM D 3359	100% (5B Pass)
Hardness	ASTM D 3363	2H Pencil (Eagle)
Impact - Direct	ASTM D 2794	80 in-lbs
Conical Mandrel	ASTM D 522	1/8" Mandrel - No cracking
Salt spray	ASTM B 117	5000 hrs 1000 hrs (degrease only)
Humidity	ASTM D 4585 @ 38° C	100 °F, 100% RH - 2000+ hrs
Cyclic Corrosion	SAE J2334	120 Cycles-Pass
Specific gravity	Calculated	1.55 ± .05
Theoretical coverage	Calculated	124 ft²/lbs at 1.0 mil 25.4 m²/kg at 25 µm





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CURING WINDOW* (object temperature)

See Cure Curve PCM-028

- 20-30 min @ 280 °F (138 °C)
- 5-20 min @ 330 °F (166 °C)
- 4-6 min @ 390 °F (199 °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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