



POWDER COATING

Technical Data Sheet

Highlights

PPG’s Epoxy Powder Coatings provide a combination of good physical and chemical resistance properties and are manufactured to meet the demands of many 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.

PPG epoxy powder primer is a great solution for corrosion resistant applications where the military specification liquid epoxy primers (MIL-DTL-53022, MIL-DTL-53030) are normally used.

- Excellent corrosion resistance
- Excellent solvent and chemical resistance

PRODUCT APPROVALS

This product has been approved by the Army Research Lab (ARL) for use in a CARC coating system. The ARL has approved this product to MIL-PRF-32348, Type I specifications. Qualified Product List (QPL) number Q-1874.

PRODUCT CHARACTERISTICS

Excellent performance as a primer for topcoats

TEST CONDITIONS

Property	Test method	Value
Substrate		Pretreated steel panels
Recommended Thickness	ASTM D 7091	1.5 - 2.5 mils
Curing Conditions	Metal Temperature	20 min @ 375 °F

PRODUCT PROPERTIES

Property	Test method	Value
Appearance	Visual Inspection	Smooth
Gloss 60°	ASTM D 523	10 - 30
Adhesion	MIL-DTL-0053022C ASTM D 5486 / D 5486M	100% (5B Pass)
Impact - Direct	ASTM D 2794	80 in-lbs
Impact - Reverse	ASTM D 2794	80 in-lbs
Conical Mandrel	ASTM D 522	1/4" Mandrel - No cracking
Knife Test	6304.2 Fed Std. 141	Pass
Salt spray	ASTM B 117	1000 hrs <1/4" scribe creep No blisters
Water Resistance	MIL-DTL-0053022C ASTM D 1308	24 Hr Exposed/Unexposed No change
Xenon Arc	SAE J2527	Pass
Specific gravity	Calculated	1.5 ± .05
Theoretical coverage	Calculated	128 ft²/lbs at 1.0 mil 26.3 m²/kg at 25 µm





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CURING WINDOW* (object temperature)

See Cure Curve MLP-001

30 min @ 350 °F (177 °C)
15 min @ 375 °F (191 °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

24 months at 80 °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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