

MILITARY DEFENSE

Epoxy Polyester

MLP90004 - Torpedo Black (Federal Std 595 17038)

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.

- · Good chemical resistance
- · Good corrosion resistance

PRODUCT CHARACTERISTICS

This is a NON CARC product

TEST CONDITIONS

Property	Test method	Value
Substrate		Pretreated steel panels
Recommended Thickness	ASTM D 7091	2.0 - 3.0 mils
Curing Conditions	Metal Temperature	20 min @ 350 °F

PRODUCT PROPERTIES

Property	Test method	Value
Appearance	Visual Inspection	Smooth
Gloss 60°	ASTM D 523	75 - 85
Adhesion	ASTM D 3359	100% (5B Pass)
Hardness	ASTM D 3363	H - 2H Pencil (Eagle)
Impact - Direct	ASTM D 2794	80 in-lbs
Impact - Reverse	ASTM D 2794	80 in-lbs
Conical Mandrel	ASTM D 522	1/8" Mandrel - No cracking
Salt spray	ASTM B 117	1000 hrs <1/8" scribe creep No blisters
Humidity	ASTM D 1735	1000 hrs <1/16" scribe creep No blisters
Xenon Arc	SAE J2527	700 hrs DE < 4.0
Specific gravity	Calculated	1.44 ± .05
Theoretical coverage	Calculated	134 ft²/lbs at 1.0 mil 27.4 m²/kg at 25 μm



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CURING WINDOW* (object temperature)

See Cure Curve PCM-009

20 min @ 350 °F (177 °C)

15 min @ 375 °F (191 °C)

12 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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