



POWDER COATING

Technical Data Sheet

Highlights

PPG’s powder coatings for military applications provide a durable uniform finish for use in harsh military environments. PPG’s Aliphatic Urethane Powder Coatings provide the combination of excellent UV durability, physical and chemical resistance properties that are required for the military coating market. Our unsurpassed application development program and technical service experts enable the consistently friendly use of these products on a variety of substrates.

PPG’s powder coatings are available in low gloss FED-STD-595 military colors to meet the requirements of the munitions and military equipment markets.

- Exterior durability
- Good chemical resistance
- Good corrosion resistance



PRODUCT APPROVALS

Specifically formulated to meet the requirements of ARDEC drawing specification #12998172.

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 @ 395 °F

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	50 in-lbs
Impact - Reverse	ASTM D 2794	10 in-lbs
Conical Mandrel	ASTM D 522	1/4" Mandrel - No cracking
Chemical Resistance		
Salt spray	ASTM B 117	400 hrs
Xenon Arc	SAE J2527	700 hrs DE < 4.0
Specific gravity	Calculated	1.52 ± .05
Theoretical coverage	Calculated	127 ft²/lbs at 1.0 mil 25.9 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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