



Polyarmor® G15

General Description

This product is a high flow, functionalized polyethylene copolymer based thermoplastic powder coating designed for low temperature applications on heat sensitive materials such as thin metal substrates and electrical components. It wets and flows quickly allowing minimal heat history.

Surface Preparation

Chemical Pretreatment

Multistage phosphate conversion coating may be used

Mechanical Preparation

(SSPCSP6) 23 mil anchor profile using clean, sharp edged blast media

NOTE: Properly preparing parts before powder coating is essential for a quality finish. This includes cleaning, rinsing, drying and insuring that the substrate surface is free and clear of any contaminants.

Fluidized Bed

For fluidizedbed dipping, preheat parts to 375° F (adjust according to part thickness). Dip parts in fluidizedbed of POLYARMOR® G15 for 46 seconds. Carefully blow off excess powder. For improved surface finish (if necessary), parts may be postbaked for a short period of time.

Electrostatic Deposition

Polyarmor® G15 can be applied via electrostatic deposition with or without preheat. When not using preheat, the powder should be applied to achieve a thickness of 8 – 12 mils. Recommended voltage setting when using Corona equipment is 40 – 60 kv. Postbaking at 325 – 400°F for 5 to 10 minutes depending on metal thickness, or until desired flow out is achieved. For preheated parts, the recommended preheat temperature is 475° F. Deposit Polyarmor® G15 812 mils or higher if desired. For improved surface finish, parts may be postbaked for a short period of time if necessary. Times and temperatures in the oven will depend on configuration and thickness of the part.

No Cure Time

Thermoplastic powder coatings need only be heated enough to flow out the coating, nothing more. Overheating may cause degradation or embrittlement of the coating. Coating may be put into service when cooled.

Powder Properties	
Coverage (100% efficiency)	24 sq. feet per pound @ 8 mils
Particle Size	Available in fluid bed & spray grades
VOC Content	ZERO
Thickness (Recommended)	8 – 10 mils
Storage Stability	Store in dry area below 90° F for unlimited shelf life

Performance Properties		
Adhesion	ASTM D 4541	>1,000 PSI (Test conducted on blasted substrate)
Hardness	ASTM D 2240	53
Impact Resistance	ASTM B 2794	>384 in./Lbs.
Tensile Strength	ASTM D 638	1931 PSI
Elongation (%)	ASTM D 638	207%
Taber Abrasion	ASTM D 4060	66 (mg loss, CS 17 wheel)
Mandrel Bend	ASTM D 522	1/8 inch, no cracks (>32%)
Melt Index	ASTM D 1238	207
Gloss	ASTM D 523	70

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