

Thermoclad Durapol

Thermoplastic Powder Coatings



PROTECH



Thermoclad Co-Polymer Thermoplastic Powder Coatings

Durapol is Protech's alternative to nylon powder coatings, designed to meet the most demanding performance requirements. These powders are engineered using thermoplastic co-polymer technology and are formulated to furnish remarkable hardness properties. Durapol powders are a high end application solution providing huge economic benefits compared to nylon based products.

Preliminary Technical Data Information

PRODUCT CODE	ASTM METHOD	DURAPOL
Bulk Density of powder, g/cm ³	ISO 1183	1.29
Hardness, Shore D	D-2240	77
Coverage, lb/per ft ² @ 10 mils		0.07± 0.005
Tensile Strength, psi.	D-651	3230 ± 100
Elongation, %	D-638	427 ± 3
Maximum Useful Operating Temperature, °F, Continuous Intermittent		190°F 230°F
Melting Range, °F		257 - 266°F
Dielectric Strength, v/mil	D-149-97a	603
Impact Resistance	D-2794-04	27 in-lbs

The salt spray resistance of all properly applied Durapol co-polymer powder coatings is excellent. A zinc or iron phosphated substrate, sandblasted and coated with the above product, will provide a durable finish showing no effect in 2,000 hours of salt spray exposure.

The specific chemistry of this co-polymer requires an annealing process after cool down from post heat in order to derive the ultimate hardness and physical properties. This process will occur at ambient conditions in approximately sixty days but can be accelerated as indicated below:

TIME	TEMPERATURE	METHOD
5 minutes	194°F	Oven
8 minutes	186°F	Oven
10 minutes	170°F	Oven
15 minutes	158°F	Oven
7 minutes	170°F	Hot Water
2 minutes	212°F	Steam

