

Electrafil® PC 04005

 Techmer Polymer Modifiers - *Polycarbonate*
General Information
General

Material Status	• Commercial: Active
Availability	• North America
Features	• Electromagnetic Shielding (EMI)
Appearance	• Colors Available
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.24		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical			
Tensile Strength (Break)	9100	psi	ASTM D638
Tensile Elongation (Break)	4.3	%	ASTM D638
Flexural Modulus	379000	psi	ASTM D790
Flexural Strength	15500	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	2.0	ft-lb/in	ASTM D256
Unnotched Izod Impact (73°F, 0.125 in)	8.3	ft-lb/in	ASTM D4812
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	270	°F	ASTM D648
CLTE - Flow	3.6E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0 to 1.0E+3	ohms	ASTM D257
Volume Resistivity	1.0 to 1.0E+3	ohms·cm	ASTM D257
Shielding Effectiveness - 30 to 1000 MHz	50	dB	ASTM D4935
Static Decay	< 0.100		FTMS 101B
Flammability			
Flame Rating (0.13 in)	V-0		UL 94

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	250	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	575 to 600	°F
Middle Temperature	600 to 630	°F
Front Temperature	590 to 620	°F
Nozzle Temperature	590 to 620	°F
Processing (Melt) Temp	580 to 620	°F
Mold Temperature	160 to 190	°F
Injection Rate	Moderate	
Back Pressure	0.00 to 100	psi

Injection Notes

Screw Speed: Medium
 Recommendations for Molding and Tool Conditions: Well vented mold
 Moisture Content, as received: Product is packaged at 0.2% or less.

