Electrafil® PC 05004

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]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.27		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.10	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Break)	9000	psi	ASTM D638
Tensile Elongation (Break)	4.3	%	ASTM D638
Flexural Modulus	388000	psi	ASTM D790
Flexural Strength	15300	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
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	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	270	°F	ASTM D648
Electrical	**Nominal Value**	**Unit**	**Test Method**
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	55	dB	ASTM D4935
Static Decay	< 0.100		FTMS 101B
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.13 in)	V-1		UL 94

Processing Information

Injection	Nominal Value	Unit
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.