Electrafil® PC-50/EC

Techmer Polymer Modifiers - *Polycarbonate*

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Carbon Black		
Features	• Antistatic	• Electrically Conductive	
Uses	• Automotive Electronics • Bushings	• Business Equipment • Conveyor Parts	• Packaging
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.21		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (73°F)	8500	psi	ASTM D638
Tensile Elongation (Break, 73°F)	6.0	%	ASTM D638
Flexural Modulus (73°F)	380000	psi	ASTM D790
Flexural Strength (73°F)	14000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	1.5	ft·lb/in	ASTM D256
Unnotched Izod Impact (73°F, 0.125 in)	20	ft·lb/in	ASTM D4812
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	250	°F	ASTM D648
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	5.5E+3	ohms	ASTM D257
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	V-2		UL 94

Additional Information

Surface Resistivity, ASTM D4496: 1E3-1E4 ohms
Static Decay Rate, DSM Test Method: 0.05 sec

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.050	%
Rear Temperature	530 to 550	°F
Middle Temperature	550 to 570	°F
Front Temperature	540 to 560	°F
Nozzle Temperature	540 to 560	°F
Processing (Melt) Temp	530 to 560	°F
Mold Temperature	130 to 180	°F
Injection Rate	Moderate	
Back Pressure	50.0 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.