Electrafil® J-50/CF/10

Techmer Polymer Modifiers - *Polycarbonate*

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 10% Filler by Weight		
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	1.24		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.5E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	1.10E+6	psi	ASTM D638
Tensile Strength (73°F)	15000	psi	ASTM D638
Tensile Elongation (Break, 73°F)	3.0	%	ASTM D638
Flexural Modulus (73°F)	1.10E+6	psi	ASTM D790
Flexural Strength (73°F)	24000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	1.1	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	295	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	288	°F	ASTM D648
CLTE - Flow	1.8E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	5.5E+5	ohms	ASTM D257
Volume Resistivity	5.5E+3	ohms·cm	ASTM D257
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	V-1		UL 94
Additional Information			
Surface Resistivity, ASTM D257: 1E5-1E6 ohms Volume Resistivity, ASTM C611: 1E3-1E4 ohm-cm			

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.