

Electrafil® J-50/CF/20/FR NAT

Techmer Polymer Modifiers - Polycarbonate

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber
Additive	• Flame Retardant
Features	• Conductive • Flame Retardant
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.29		ASTM D792
Molding Shrinkage - Flow (0.125 in)	6.0E-3 to 8.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.00E+6	psi	ASTM D638
Tensile Strength (Yield)	19000	psi	ASTM D638
Tensile Strength (Break)	19000	psi	ASTM D638
Tensile Elongation (Break)	1.8	%	ASTM D638
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	1.0	ft·lb/in	ASTM D256
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+6	ohms	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		V-0	
0.12 in		V-0	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	3.0 to 4.0	hr
Rear Temperature	550 to 590	°F
Middle Temperature	560 to 600	°F
Front Temperature	570 to 610	°F
Nozzle Temperature	570 to 610	°F
Processing (Melt) Temp	560 to 605	°F
Mold Temperature	150 to 225	°F
Injection Rate	Slow-Moderate	
Back Pressure	25.0 to 50.0	psi
Screw Speed	Moderate	

