

Electrafil® J-50/CF/30

Techmer Polymer Modifiers - Polycarbonate

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight
Features	• Antistatic • Electrically Conductive
Uses	• Automotive Electronics • Business Equipment • Packaging • Bushings • Conveyor Parts
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.33		ASTM D792
Molding Shrinkage - Flow (0.125 in)	5.0E-4	in/in	ASTM D955
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	1.80E+6	psi	ASTM D638
Tensile Strength (73°F)	22000	psi	ASTM D638
Tensile Elongation (Break, 73°F)	1.8	%	ASTM D638
Flexural Modulus (73°F)	2.20E+6	psi	ASTM D790
Flexural Strength (73°F)	32000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.8	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	300	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	290	°F	ASTM D648
CLTE - Flow	1.0E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	5.5E+3	ohms	ASTM D257
Volume Resistivity	55	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: 1E3-1E4 ohms			
Volume Resistivity, ASTM C611: 10-100 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.	

