

Electrafil® J-1/CF/40 BK

Techmer Polymer Modifiers - Polyamide 66

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber, 40% Filler by Weight
Appearance	• Black
Processing Method	• Injection Molding

Properties ¹

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	33000	psi	ASTM D638
Tensile Stress (Yield)	32000	psi	ISO 527-2
Tensile Elongation (Break)	1.6	%	ASTM D638
Tensile Strain (Break)	2.0	%	ISO 527-2
Flexural Modulus	3.64E+6	psi	ASTM D790
Flexural Modulus	3.25E+6	psi	ISO 178
Flexural Strength	44000	psi	ASTM D790
Flexural Stress	46600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (0.125 in)	3.6	ft·lb/in ²	ISO 180

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	510 to 540	°F
Middle Temperature	520 to 550	°F
Front Temperature	530 to 560	°F
Nozzle Temperature	540 to 570	°F
Processing (Melt) Temp	515 to 565	°F
Mold Temperature	125 to 200	°F
Injection Rate	Slow	
Back Pressure	25.0 to 75.0	psi
Screw Speed	Slow-Moderate	

