

Electrafil® J-4/25/CF/15 NATL

Techmer Polymer Modifiers - Polyamide 612

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber, 15% Filler by Weight
Appearance	• Natural Color
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.30	g/cm ³	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	23800	psi	ASTM D638
Tensile Stress (Yield)	1.71E+6	psi	ISO 527-2
Tensile Strain (Break)	2.8	%	ISO 527-2
Flexural Modulus	2.03E+6	psi	ASTM D790
Flexural Strength	37600	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (0.125 in)	4.9	ft·lb/in ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	392	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	390	°F	ISO 75-2/A
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+2 to 1.0E+4	ohms	ASTM D257

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	2.0 to 3.0	hr
Rear Temperature	500 to 540	°F
Middle Temperature	510 to 550	°F
Front Temperature	520 to 560	°F
Nozzle Temperature	525 to 560	°F
Processing (Melt) Temp	500 to 555	°F
Mold Temperature	125 to 175	°F
Injection Rate		Slow
Back Pressure	25.0 to 75.0	psi
Screw Speed		Slow-Moderate

