

Electrafil® J-3/CF/40

Techmer Polymer Modifiers - Polyamide 6

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Carbon Fiber, 40% Filler by Weight
Agency Ratings	• MIL B-81705
RoHS Compliance	• RoHS Compliant
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)	1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	1.0	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3.50E+6	psi	ASTM D638
Tensile Strength (Break, 73°F)	33000	psi	ASTM D638
Flexural Modulus	3.20E+6	psi	ASTM D790
Flexural Strength (Break, 73°F)	50000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.0	ft·lb/in	ASTM D256
Unnotched Izod Impact (73°F, 0.125 in)	32	ft·lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	400	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	165 to 220	°F
Drying Time	2.0 to 16	hr
Rear Temperature	520 to 540	°F
Middle Temperature	530 to 550	°F
Front Temperature	510 to 530	°F
Nozzle Temperature	500 to 520	°F
Processing (Melt) Temp	520 to 540	°F
Mold Temperature	130 to 180	°F

