

Electrafil® PA6 CF30

 Techmer Polymer Modifiers - *Polyamide 6*
General Information
General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight
Features	• Conductive
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.27		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.90	%	ASTM D570
Mechanical			
Tensile Strength (Break)	31000	psi	ASTM D638
Tensile Elongation (Break)	1.5	%	ASTM D638
Flexural Modulus	2.30E+6	psi	ASTM D790
Flexural Strength	45000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	2.0	ft·lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	118		ASTM D785
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	420	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
CLTE - Flow	1.1E-5	in/in/°F	ASTM D696
Electrical			
Volume Resistivity	10 to 1.0E+3	ohms·cm	ASTM D257

Processing Information

	Nominal Value	Unit
Injection		
Drying Temperature	180	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	510 to 530	°F
Middle Temperature	530 to 550	°F
Front Temperature	520 to 540	°F
Nozzle Temperature	520 to 540	°F
Processing (Melt) Temp	530 to 550	°F
Mold Temperature	175 to 220	°F
Injection Rate	Slow-Moderate	
Back Pressure	0.00 to 50.0	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.

