

Electrafil® J-3/CF/30

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, 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	1.28		ASTM D792
Molding Shrinkage - Flow (0.125 in)	1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.40	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73°F)	2.80E+6	psi	ASTM D638
Tensile Strength (73°F)	30000	psi	ASTM D638
Tensile Elongation (Break, 73°F)	3.3	%	ASTM D638
Flexural Modulus (73°F)	2.50E+6	psi	ASTM D790
Flexural Strength (73°F)	46000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.8	ft-lb/in	ASTM D256
Unnotched Izod Impact (73°F, 0.125 in)	15	ft-lb/in	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	415	°F	ASTM D648
CLTE - Flow	6.0E-6	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	5.5E+2	ohms	ASTM D257
Volume Resistivity	5.5	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94
Additional Information	Surface Resistivity, ASTM D4496: 1E2-1E3 ohms Volume Resistivity, ASTM C611: 1-10 ohm-cm		

Processing Information

Injection	Nominal Value	Unit
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.	

