

Electrafil® PBT CF30 BK

 Techmer Polymer Modifiers - *Polybutylene Terephthalate*
General Information

General			
Material Status	• Commercial: Active		
Availability	• North America		
Filler / Reinforcement	• Carbon Fiber		
Features	• Antistatic	• ESD Protection	• Statically Conductive
Appearance	• Colors Available		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.43		ASTM D792
Molding Shrinkage - Flow (0.125 in)	4.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.12	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	20500	psi	ASTM D638
Tensile Elongation (Break)	1.0	%	ASTM D638
Flexural Modulus	2.30E+6	psi	ASTM D790
Flexural Strength	30000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.1	ft·lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	118		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	428	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	419	°F	ASTM D648
CLTE - Flow	2.2E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 10	ohms	ASTM D257
Volume Resistivity	< 10	ohms·cm	ASTM D257
Static Decay	< 2.0	sec	MIL PRF-81705D
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	250	°F
Drying Time	4.0	hr
Rear Temperature	450 to 525	°F
Middle Temperature	450 to 525	°F
Front Temperature	450 to 525	°F
Processing (Melt) Temp	450 to 475	°F
Mold Temperature	150 to 180	°F
Back Pressure	50.0 to 100	psi
Screw Speed	30 to 60	rpm

