

Electrafil® PA6/6 CF30 BK

Techmer Polymer Modifiers - Polyamide 66

General Information
General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight
Additive	• Lubricant
Features	• Conductive • Lubricated
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)	0.48	%	ASTM D570
Mechanical			
Tensile Strength (Break)	34000	psi	ASTM D638
Tensile Elongation (Break)	2.0 to 3.0	%	ASTM D638
Flexural Modulus	2.80E+6	psi	ASTM D790
Flexural Strength	50000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	1.5	ft-lb/in	ASTM D256
Unnotched Izod Impact (0.125 in)	12	ft-lb/in	ASTM D4812
Hardness			
Rockwell Hardness (M-Scale)	97		ASTM D785
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	500	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	495	°F	ASTM D648
Melting Temperature	505	°F	
CLTE - Flow	1.0E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+2 to 2.0E+2	ohms	ASTM D257
Flammability			
Flame Rating	HB		UL 94

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	540 to 560	°F
Middle Temperature	550 to 570	°F
Front Temperature	530 to 550	°F
Nozzle Temperature	520 to 580	°F
Processing (Melt) Temp	540 to 580	°F
Mold Temperature	175 to 220	°F
Injection Rate	Slow-Moderate	
Back Pressure	0.00 to 50.0	psi



Injection Notes

Screw Speed: Slow

Recommendations for Molding and Tool Conditions: Well vented mold

Moisture Content, as received: Product is packaged at 0.2% or less.

Notes

¹ Typical properties: these are not to be construed as specifications.

