

Electrafil® PA6/6 03005 CF

Techmer Polymer Modifiers - Polyamide 66

General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Carbon Fiber
Additive	• Heat Stabilizer • Impact Modifier • Lubricant
Features	• Conductive • High Impact Resistance • Heat Stabilized • Lubricated
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.19		ASTM D792
Molding Shrinkage - Flow (0.125 in)	0.012	in/in	ASTM D955
Water Absorption (24 hr)	0.90	%	ASTM D570
Mechanical			
Tensile Strength (Yield)	15200	psi	ASTM D638
Tensile Elongation (Break)	6.0	%	ASTM D638
Flexural Modulus	825000	psi	ASTM D790
Flexural Strength	22000	psi	ASTM D790
Impact			
Notched Izod Impact			ASTM D256
-40°F, 0.125 in	1.0	ft·lb/in	
73°F, 0.125 in	1.5	ft·lb/in	
Unnotched Izod Impact (0.125 in)	12	ft·lb/in	ASTM D4812
Hardness			
Rockwell Hardness (R-Scale)	111		ASTM D785
Thermal			
Deflection Temperature Under Load (66 psi, Unannealed)	485	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	428	°F	ASTM D648
CLTE - Flow	4.4E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	1.0E+4 to 1.0E+6	ohms	ASTM D257
Volume Resistivity	1.0E+4 to 1.0E+6	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.

