Electrafil® PA6/6 CF40 BK

Techmer Polymer Modifiers - *Polyamide 66*

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 40% Filler by Weight		
Features	• Antistatic	• Electrically Conductive	
Uses	• Automotive Electronics • Bushings	• Business Equipment • Conveyor Parts	• Packaging
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.33		ASTM D792
Molding Shrinkage - Flow	1.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.60	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (73°F)	4.10E+6	psi	ASTM D638
Tensile Strength (73°F)	40000	psi	ASTM D638
Tensile Elongation (Break, 73°F)	1.8	%	ASTM D638
Flexural Modulus (73°F)	3.40E+6	psi	ASTM D790
Flexural Strength (73°F)	59000	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 (66 psi, Unannealed)	505	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	495	°F	ASTM D648
CLTE - Flow	8.0E-6	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	55	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: 10-100 ohms
Volume Resistivity, ASTM C611: 1-10 ohm-cm
Shielding Effectiveness, ES7-83, 1GHz: 30-40 dB

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	530 to 550	°F
Middle Temperature	550 to 570	°F
Front Temperature	540 to 560	°F

Nozzle Temperature	540 to 550 °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.