

Electrafil® PA6 04001 BK MB

 Techmer Polymer Modifiers - *Polyamide 6*
General Information
General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber • Stainless Steel Fiber
Additive	• Lubricant
Features	• Electromagnetic Shielding (EMI) • Lubricated • Radio Frequency Shielding (RFI)
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

	Nominal Value	Unit	Test Method
Physical			
Density / Specific Gravity	1.49		ASTM D792
Molding Shrinkage - Flow (0.125 in)	2.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	1.0	%	ASTM D570
Mechanical			
Tensile Strength (Yield)	20000	psi	ASTM D638
Tensile Elongation (Break)	3.5	%	ASTM D638
Flexural Modulus	1.10E+6	psi	ASTM D790
Flexural Strength	28000	psi	ASTM D790
Impact			
Notched Izod Impact (73°F, 0.125 in)	1.6	ft·lb/in	ASTM D256
Hardness			
Rockwell Hardness (R-Scale)	117		ASTM D785
Thermal			
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ASTM D648
CLTE - Flow	3.0E-5	in/in/°F	ASTM D696
Electrical			
Surface Resistivity	10 to 1.0E+3	ohms	ASTM D257
Volume Resistivity	1.0 to 10	ohms·cm	ASTM D257
EMI Attenuation	50	dB	ASTM D4935
Static Decay	< 2.0	sec	FTMS 101B
Flammability			
Flame Rating (0.06 in)	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	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.

Notes

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

