

Magnablend® PPS 05003

 Techmer Polymer Modifiers - *Polyphenylene Sulfide*
General Information
General

Material Status	• Commercial: Active
Availability	• North America
Additive	• Lubricant • Strontium Ferrite
Features	• Lubricated
Appearance	• Colors Available
Forms	• Pellets
Processing Method	• Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	3.35		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	6400	psi	ASTM D638
Tensile Elongation (Break)	1.0	%	ASTM D638
Flexural Modulus	1.10E+6	psi	ASTM D790
Flexural Strength	11000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	0.60	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	500	°F	ASTM D648
Deflection Temperature Under Load (264 psi, Unannealed)	480	°F	ASTM D648
Melting Temperature	520	°F	
CLTE - Flow	2.0E-5	in/in/°F	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+10	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.031 in)	V-0		UL 94

Additional Information

Unoriented Magnetic

- Residual Induction, Br: 1100 Gauss
- Coercive Force, Hc: 750 Oersteds
- Intrinsic Coercive Force, Hc: 2400 Oersteds
- Maximum Energy Produce, Bh max: 0.2 Mega Gauss Oersteds

Oriented Magnetic

- Residual Induction, Br: 1550 Gauss
- Coercive Force, Hc: 1050 Oersteds
- Intrinsic Coercive Force, Hc: 2300 Oersteds
- Maximum Energy Product, Bh max: 0.4 Mega Gauss Oersteds

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	325	°F
Drying Time	4.0	hr
Rear Temperature	550 to 580	°F
Middle Temperature	600 to 650	°F
Front Temperature	590 to 630	°F
Nozzle Temperature	600 to 630	°F
Processing (Melt) Temp	615 to 640	°F
Mold Temperature	265 to 325	°F

