PolyOne™

Edgetek™ MP-10GF/000 BLACK
Polyphenylene Ether + PS

Key Characteristics

General	
Material Status	• Commercial: Active
Regional Availability	• Asia Pacific
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Appearance	• Black
Processing Method	• Injection Molding

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.13	1.13	ASTM D792
Molding Shrinkage - Flow	3.0E-3 in/in	0.30 %	ASTM D955
Molding Shrinkage - Across Flow	5.0E-3 in/in	0.50 %	ASTM D955
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus [2]	600000 psi	4140 MPa	ASTM D638
Tensile Strength [2]	12300 psi	85.0 MPa	ASTM D638
Tensile Elongation [2] (Break)	5.0 %	5.0 %	ASTM D638
Flexural Modulus [3]	580000 psi	4000 MPa	ASTM D790
Flexural Strength [3]	23900 psi	165 MPa	ASTM D790
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact			ASTM D256
73°F (23°C), 0.126 in (3.20 mm)	2.1 ft·lb/in	110 J/m	
Thermal	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed, 0.126 in (3.20 mm)	262 °F	128 °C	
Electrical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Surface Resistivity	1.0E+15 ohms	1.0E+15 ohms	ASTM D257
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating			UL 94
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	194 to 212 °F	90 to 100 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Rear Temperature	518 to 572 °F	270 to 300 °C
Middle Temperature	518 to 572 °F	270 to 300 °C
Front Temperature	518 to 572 °F	270 to 300 °C
Mold Temperature	149 to 203 °F	65 to 95 °C

Injection Notes

Injection Pressure: MED-HIGH
Hold Pressure: MED-HIGH
Screw Speed: MODERATE
Back Pressure: LOW

Notes

[1] Typical values are not to be construed as specifications.

[2] 0.20 in/min (5.0 mm/min)

[3] 0.051 in/min (1.3 mm/min)

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