

Technical Data Sheet

Diamaloy QR-4000GF10-BKBLK



Polyphenylene Ether + PS + PA

Product Description

Diamaloy QR-4000GF10-BKBLK is a Polyphenylene Ether + PS + PA Glass Fiber, 10% filled material and is typically used in Injection Molding applications. Features include: Chemical Resistant, Good Stiffness, and High Heat Resistance.

Processing Method	Injection Molding
Attribute	Good Chemical Resistance; Good Stiffness; High Heat Resistance
Forms	Pellets
Appearance	Black; Colors Available
Filler/Reinforcement	Glass Fiber, 10%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density - Specific Gravity	1.17	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield	66.2	MPa	ASTM D638
Flexural Strength at Yield	152	MPa	ASTM D790
Flexural Modulus	2900	MPa	ASTM D790
Tensile Elongation at Break	10	%	ASTM D638
Impact			
Notched Izod Impact			
(23 °C)	69	J/m	ASTM D256
(-29 °C)	53	J/m	ASTM D256
Thermal			
Deflection Temperature Under Load Unannealed (264 psi)	177	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	232	°C	ASTM D648

Injection Parameters	Nominal Value	Units
Drying Time	4.0 to 8.0	hr
Drying Temperature	107	°C
Nozzle Temperature	282 to 299	°C
Processing (Melt) Temp	282 to 299	°C
Front Temperature	277 to 299	°C
Middle Temperature	271 to 299	°C
Rear Temperature	266 to 299	°C
Mold Temperature	77 to 116	°C
Drying Time, Maximum	8	hr