



GAZOLE™ 6430CF

Product Details: Ultra high performance thermoplastic polymer, 30% Carbon fiber reinforced in AB-PBI/PEK Blend, semi-crystalline granules suitable for injection molding as well as extrusion, easy flow, dark green in color.

Application Areas: Suitable for high temperature applications under extreme high load, Excellent wear resistance, suitable for semiconductor applications and plasma handling equipments.

Typical Properties:

PROPERTY	TEST METHOD/CONDITIONS	UNIT	GAZOLE™ 6430CF
General Properties			
Density	23°C	g/cc	1.40
Water Absorption	ASTM D 570-98	%	0.23
Shore D Hardness	ASTM D 2240-05		95
Mold Shrinkage (445°C nozzle, 220°C Mold)	Along Flow	%	0
	Across Flow	%	0.2
Spiral Flow (445°C nozzle, 220°C Mold)	ASTM D 3123	mm	37

Thermal Properties			
Glass Transition Temperature(Tg)	ASTM D 3418	°C	152
Melting Point (Tm)	ASTM D 3418	°C	372
Heat Deflection Temperature (HDT)	ASTM D 648 /1.8 MPa	°C	358
Continuous Use Temperature (Expected)	UL 746B	°C	300
Temperature of Initial (5%) Weight Loss in:			

Mechanical Properties at 23°C			
Tensile Strength	ASTM D 638	MPa	230
Tensile Modulus	ASTM D 638	GPa	28.5
Elongation at Break	ASTM D 638	%	3.7
Flexural Strength	ASTM D 790	MPa	380
Flexural Modulus	ASTM D 790	GPa	28.8
Izod Impact Strength (Notched)	ASTM D 256	J/m	45



PROPERTY	TEST METHOD/CONDITIONS	UNIT	GAZOLE™ 6430CF
Fire Properties			
Flammability	UL 94/0.8 mm	-	V-0

Recommended Processing Conditions	
Drying Temperature/Time	4-6 hrs at 150°C
Temperature Settings	400-445°C
Nozzle Temperature	445°C
Hopper/ Throat Temperature	60-80°C
Mold Temperature	200-220°C
Nominal Granule Size	
<ul style="list-style-type: none"> • Dimensions, length 2.0 – 4.0 mm, diameter 2.0 – 3.5 mm • No longs greater than 8.0 mm • Granules of uniform cut and color 	

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