# G-PAEK™ 1460GF

### Polyether Ketone

Gharda Chemicals Ltd.

#### Message:

Product Details: Ultra high performance thermoplastic polymer, 60% glass fiber reinforced in Polyether Ketone, semi-crystalline granules suitable for injection molding, easy flow, Beige in color.

Application Areas: Suitable for high temperature applications, where higher strength in load-bearing applications is required. Chemically resistant to aggressive environments, suitable for sterilization for medical and food contact applications.

General Information					
Filler / Reinforcement	Glass Fiber,60% Filler by Weight				
Features	Good Chemical Resistance				
	Good Flow				
	Good Sterilizability				
	Good Strength				
	High Heat Resistance				
	Semi Crystalline				
Uses	High Temperature Applications				
	Medical/Healthcare Applications				
	Non-specific Food Applications				
Appearance	Beige				
Forms	Granules				
Processing Method	Injection Molding				
Physical	Nominal Value	Unit	Test Method		
Density	1.87	g/cm³			
Spiral Flow <sup>1</sup>	27.0	cm	ASTM D3123		
Molding Shrinkage <sup>2</sup>					
Flow	0.30	%			
Across Flow	0.84	%			
Water Absorption (Equilibrium)	0.030	%	ASTM D570		
Hardness	Nominal Value	Unit	Test Method		
Rockwell Hardness (M-Scale)	101		ASTM D785		
Durometer Hardness (Shore D)	94		ASTM D2240		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Modulus (23°C)	28100	MPa	ASTM D638		
Tensile Strength (Yield, 23°C)	187	MPa	ASTM D638		
Tensile Elongation (Break, 23°C)	2.0 to 3.0	%	ASTM D638		
Flexural Modulus (23°C)	26000	MPa	ASTM D790		
Flexural Strength (23°C)	212	MPa	ASTM D790		

Impact	Nominal Value	Unit	Test Method	
Notched Izod Impact (23°C)	75	J/m	ASTM D256	
Unnotched Izod Impact	650	J/m	ASTM D256	
Thermal	Nominal Value	Unit	Test Method	
Deflection Temperature Under Load (1	.8			
MPa, Unannealed)	359	°C	ASTM D648	
Continuous Use Temperature	280	°C	UL 746B	
Glass Transition Temperature	152	°C	ASTM D3418	
Melting Temperature	372	°C	ASTM D3418	
Electrical	Nominal Value	Unit	Test Method	
Surface Resistivity	1.0E+16	ohms	ASTM D257	
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257	
Flammability	Nominal Value	Unit	Test Method	
Flame Rating (0.800 mm)	V-0		UL 94	
Injection	Nominal Value	Unit		
Drying Temperature	150	°C		
Drying Time	4.0 to 6.0	hr		
Hopper Temperature	60.0 to 80.0	°C		
Nozzle Temperature	430	°C		
Processing (Melt) Temp	400 to 430	°C		
Mold Temperature	200 to 220	°C		
NOTE				
1.	430°C nozzle, 220°C Mold	430°C nozzle, 220°C Mold		
2.	430°C nozzle, 220°C Mold			

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#### Recommended distributors for this material

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