

Gharda Chemicals G-PAEK, 1230FC Ultra High Performance PEK Polymer

Category : Polymer , Thermoplastic , Polyketone , Polyaryletherketone (PAEK), Carbon Fiber Filled

Material Notes:

Product Details: Ultra High Performance Thermoplastic material, 10% carbon fiber, 10% PTFE and 10% graphite reinforced in Poly Aryl Ether Ketone, semi-crystalline granules suitable for injection molding, easy flow, Black in color

Application Areas: Suitable for high temperature application, where higher strength & stiffness needed in load bearing application. Excellent wear resistance. Chemically resistant to aggressive environments, suitable for sterilization for medical and food contact applications.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Gharda-Chemicals-G-PAEK-1230FC-Ultra-High-Performance-PEK-Polymer.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.45 g/cc	1.45 g/cc	
Water Absorption	0.050 % @Time 86400 sec	0.050 % @Time 24.0 hour	
Linear Mold Shrinkage, Flow	0.0011 cm/cm	0.0011 in/in	410Â°C nozzle, 220Â°C mold
Linear Mold Shrinkage, Transverse	0.0050 cm/cm	0.0050 in/in	410Â°C nozzle, 220Â°C mold
Crystallinity	40 %	40 %	DSC

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	106	106	ASTM D785
Hardness, Shore D	91	91	
Tensile Strength at Break	45.0 MPa @Temperature 250 Â°C	6530 psi @Temperature 482 Â°F	ASTM D638
	55.0 MPa @Temperature 200 Â°C	7980 psi @Temperature 392 Â°F	ASTM D638
	80.0 MPa @Temperature 150 Â°C	11600 psi @Temperature 302 Â°F	ASTM D638
	120 MPa @Temperature 100 Â°C	17400 psi @Temperature 212 Â°F	ASTM D638
	130 - 135 MPa @Temperature 23.0 Â°C	18900 - 19600 psi @Temperature 73.4 Â°F	ASTM D638
	145 MPa	21000 psi	

Mechanical Properties	Metric @ Temperature -10.0 Â°C	English @ Temperature 14.0 Â°F	ASTM D638 Comments
	160 MPa	23200 psi	ASTM D638
	@Temperature -50.0 Â°C	@Temperature -58.0 Â°F	
Elongation at Break	1.5 - 2.0 %	1.5 - 2.0 %	ASTM D638
Tensile Modulus	11.5 GPa	1670 ksi	ASTM D638
Flexural Strength	210 MPa	30500 psi	ASTM D790
Flexural Modulus	10.5 GPa	1520 ksi	ASTM D790
Izod Impact, Notched	0.400 - 0.450 J/cm	0.749 - 0.843 ft-lb/in	ASTM D256
Izod Impact, Unnotched	6.10 J/cm	11.4 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
Melting Point	370 - 372 Â°C	698 - 702 Â°F	DSC
Deflection Temperature at 1.8 MPa (264 psi)	368 Â°C	694 Â°F	
Glass Transition Temp, Tg	152 - 154 Â°C	306 - 309 Â°F	DSC/onset
Flammability, UL94	V-0 @Thickness 0.800 mm	V-0 @Thickness 0.0315 in	

Processing Properties	Metric	English	Comments
Processing Temperature	390 - 425 Â°C	734 - 797 Â°F	
Nozzle Temperature	425 Â°C	797 Â°F	
Mold Temperature	200 - 220 Â°C	392 - 428 Â°F	
Drying Temperature	150 Â°C	302 Â°F	
Dry Time	4 - 6 hour	4 - 6 hour	

Descriptive Properties	Value	Comments
Hopper/ Throat Temperature	60-80Â°C	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China