GAZOLE™ 6200G

Product Details: Ultra high performance thermoplastic polymer, PBI Poly (2, 5 benzimidazole) blended with Polyether Ketone, semi-crystalline granules suitable for injection molding as well as extrusion, easy flow, brown in color.

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

Typical Properties:

PROPERTY	TEST METHOD/CONDITIONS	UNIT	GAZOLE™ 6200G
General Properties			
Density	23°C	g/cc	1.3
Water Absorption	ASTM D 570-98	%	0.27
Shore D Hardness	ASTM D 2240-05		89
Mold Shrinkage (440°C nozzle, 220°C Mold)	Along Flow	%	0.5
	Across Flow	%	0.7
Spiral Flow (440°C nozzle, 220°C Mold)	ASTM D 3123	mm	33
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	174
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	90
Tensile Modulus	ASTM D 638	MPa	5600
Elongation at Break	ASTM D 638	%	2
Flexural Strength	ASTM D 790	MPa	150
Flexural Modulus	ASTM D 790	MPa	6100
Izod Impact Strength(Notched)	ASTM D 256	J/m	35
Rheological Properties			
Melt Viscosity at 430°C	ASTM D 3835/@1000 s^{-1}	Pa.s	390

R&D CENTRE/MARKETING DIVISION: GHARDA CHEMICALS LTD, B-27/29, PHASE-1 MIDC, DOMBIVLI (EAST), DIST: THANE-421203, TEL: +91-251-2803382-86 / +91-251-2440001, Email: polymer@gharda.com

PROPERTY	TEST METHOD/CONDITIONS	UNIT	GAZOLE™ 6200G
Fire Properties			
Flammability	UL 94/0.8 mm	-	V-0

Recommended Processing Conditions	
Drying Temperature/Time	4-6 hrs at 150°C
Temperature Settings	400-440°C
Nozzle Temperature	440°C
Hopper/ Throat Temperature	60-80°C
Mold Temperature	200-220°C
Nominal Granule Size	
• 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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