



GAPEKK 3200G

Product Details: Ultra high performance thermoplastic polymer, unfilled Polyether Ketone Ketone (PEKK), semicrystalline granules suitable for injection molding and stock shapes extrusion, standard flow, Brown in color.

Application Areas: Suitable for high temperature applications, with high compressive strength & abrasion resistance, high chemical resistance & oil resistance etc.

Typical Properties:

PROPERTY	TEST METHOD/CONDITIONS	UNIT	GAPEKK™ 3200G
General Properties			
Density	23°C	g/cc	1.30
Water Absorption	ASTM D 570-98	%	0.05
Shore D Hardness	ASTM D 2240-05	-	88
Mold Shrinkage (420°C nozzle, 220°C Mold)	Along Flow	%	1.0
	Across Flow	%	1.2

Thermal Properties			
Glass Transition Temperature (T _g)	ASTM D 3418	°C	176
Melting Point (T _m)	ASTM D 3418	°C	396
Heat Deflection Temperature (HDT)	ASTM D 648 /1.8 MPa	°C	189
Continuous Use Temperature (Expected)	UL 746B	°C	300

Mechanical Properties at 23°C			
Tensile Strength	ASTM D 638	MPa	110
Tensile Modulus	ASTM D 638	GPa	4.0
Elongation at Break	ASTM D 638	%	10-15
Flexural Strength	ASTM D 790	MPa	180
Flexural Modulus	ASTM D 790	GPa	4.3
Compressive Strength	ASTM D 695	MPa	132
Compressive Modulus	ASTM D 695	MPa	2100
Izod Impact Strength(Notched)	ASTM D 256	J/m	50
Izod Impact Strength(Un-notched)	ASTM D 256	J/m	No Break



PROPERTY	TEST METHOD/CONDITIONS	UNIT	GAPEKK™ 3200G
Rheological Properties			
Haake Thermal Stability	GSRF 05/420°C, 60 rpm	min	20

Fire Properties			
Flammability	UL 94/0.8 mm	-	V-0

Recommended Processing Conditions	
Drying Temperature/Time	4-6 hrs at 150°C
Temperature Settings	390-420°C
Nozzle Temperature	420°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 • Processing (Injection Molding/Extrusion) period of GAPEKK 3300G polymer is strongly recommended to maintain below 20 min.

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