

# PYRAMID™ KD2000-G01

## PEEK unfilled, Standard Flow

GENERAL	DESCRIPTION
Available in	Pellets
Color	Tan

PHYSICAL	@ CONDITION	TEST METHOD	IMPERIAL	METRIC
Density		ASTM D792	0.047 lbs/in <sup>3</sup>	1.30 g/cm <sup>3</sup>
Moisture Absorption	@ 23°C, 24hrs	ASTM D570	< 0.2 %	< 0.2 %
Linear Mold Shrinkage		ASTM D955	0.012 %	0.012 %
Hardness, Shore D/Rockwell M		ASTM D785	88	88
Melting Flow Rate	@ 8.4 Kg/ 400 °C	ASTM D1238	0.044	20

MECHANICAL	@ CONDITION	TEST METHOD	IMPERIAL	METRIC
Tensile Strength		ASTM D638	14 kpsi	97.00 MPa
Tensile Modulus		ASTM D638	0.51 Mpsi	3.50 GPa
Tensile Elongation	@ break	ASTM D638	50.0 %	50.00 %
Flexural Strength		ASTM D790	25 kpsi	172.00 MPa
Flexural Modulus		ASTM D790	0.6 Mpsi	4.00 GPa
Izod Impact, Notched	@ 1/8"	ASTM D256	1.7 ft-lb/in	0.91 J/cm
Izod Impact, Unnotched		ASTM D256	No break ft-lb/in	No break J/cm

THERMAL	@ CONDITION	TEST METHOD	IMPERIAL	METRIC
Melting Temperature		DSC	644 °F	340 °C
Glass Transition Temperature		DSC	289 °F	143 °C
HDT	@ 1.8 MPa (264 psi)	ASTM D648	320 °F	160 °C
CTE, linear	@ 24 - 149°C	ASTM D696	33.0 µin/in-°F	59.4 µm/m-°C
Thermal Conductivity		ASTM C177	0.14 BTU-in/ft <sup>2</sup> -hr-°F	0.25 W/m-K
Flammability	@ 3mm (1/8 in)	UL 94	V-0 class	V-0 class

ELECTRICAL	@ CONDITION	TEST METHOD	IMPERIAL	METRIC
Dielectric Strength		ASTM D149	457 V/mil	18.00 KV/mm
Dielectric Constant	@ 1 kHz	ASTM D150/IEC 60250	3.3	3.3
Dissipation Factor	@ 1 kHz	ASTM D150/IEC 60250	0.004	0.004
Volume Resistivity		ASTM D257	1 x 10 <sup>16</sup>	ohm-cm
Surface Resistivity		ASTM D257	2 x 10 <sup>16</sup>	ohm/sq

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