

Pyramid KD2450-NT (PEEK)

PEEK with 30% Ceramic Filler

General	ASTM #	US Value	SI Unit
Form	---	Pellets	
Composition	---	Ceramic filled PEEK	
Filler Content , %	---	30	
Density, lb/in ³	D792	0.054	1.5 g/ml
Mechanical			
Tensile Strength (Break), Kpsi	D638	11.5	80 MPa
Tensile Modulus, Mpsi	D638	0.6	4.4 GPa
Elongation (Break), %	D638	>10 %	
Flexural Strength (Yield) Kpsi	D790	22	155 MPa
Flexural Modulus Mpsi	D790	0.6	4.4 GPa
Izod, Notched, ft-lb/in @1/8"	D256	1	53 J/cm
Thermal			
Melting Point, °F	DSC	645	341°C
Tg (Glass Transition), °F	DSC	290	143°C
Flammability Rating (UL 94)	UL 94		
HDT@ 66 psi, °F	D648	> 500	> 260°C
CTE, linear $\mu\text{in/in-}^{\circ}\text{F}$ (< Tg)	D696	2×10^{-5}	$3.6 \times 10^{-5} \mu\text{m/m-}^{\circ}\text{C}$
Electrical			
Dielectrical Strength, V/mil	D149	400	15 KV/mm
Dissipation Factor @ 1 MHz	D150	0.005	
Volume Resistivity, Ohm-cm x 10 ¹⁵	D257	1.0	
Surface Resistivity, Ohm/sq x 10 ¹³	D257	1.0	