

Manifattura Cattaneo PEEK Polyetheretherketone

Category : Polymer , Thermoplastic , Polyketone , Polyetheretherketone (PEEK)

Material Notes:

Manifattura Cattaneo products are available in semi-finished forms such as bars, profiles, sheets and plates. Information provided by Manifattura Cattaneo s.p.a.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Manifattura-Cattaneo-PEEK-Polyetheretherketone.php

Physical Properties	Metric	English	Comments
Density	1.26 - 1.32 g/cc	0.0455 - 0.0477 lb/in ³	ASTM D792
Moisture Absorption at Equilibrium	0.50 % @Temperature 23.0 Â°C	0.50 % @Temperature 73.4 Â°F	50% RH; ASTM D570

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	99	99	ASTM D785
Tensile Strength at Break	94.0 MPa	13600 psi	ASTM D638
Tensile Strength, Yield	88.0 MPa	12800 psi	ASTM D638
Elongation at Break	20 - 60 %	20 - 60 %	ASTM D638
Elongation at Yield	5.0 %	5.0 %	ASTM D638
Tensile Modulus	3.50 GPa	508 ksi	ASTM D638
Flexural Strength	170 MPa	24700 psi	ASTM D790
Compressive Strength	122 MPa	17700 psi	ASTM D695
Poissons Ratio	0.40	0.40	
Izod Impact, Notched (ISO)	6.10 kJ/m ²	2.90 ft-lb/in ²	ASTM D256
Izod Impact, Unnotched (ISO)	NB	NB	ASTM D256
Coefficient of Friction, Dynamic	0.25	0.25	on polished steel; MPC Test
Coefficient of Friction, Static	0.22	0.22	on polished steel; MPC Test
K Factor (Wear Factor)	3.9	3.9	Âµm/s. PV = 0.1 MPa-m/s; max P = 30 MPa; MPC Test
Limiting Pressure Velocity	1.90 MPa-m/sec	54200 psi-ft/min	without lubrication; MPC Test

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	47.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	26.1 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	
	@Temperature 23.0 - 100 $\text{Å}^\circ\text{C}$	@Temperature 73.4 - 212 $\text{Å}^\circ\text{F}$	
Thermal Conductivity	0.250 W/m-K	1.74 BTU-in/hr-ft $\text{Å}^2\cdot\text{Å}^\circ\text{F}$	ASTM D177
Maximum Service Temperature, Air	260 $\text{Å}^\circ\text{C}$	500 $\text{Å}^\circ\text{F}$	
Deflection Temperature at 1.8 MPa (264 psi)	160 $\text{Å}^\circ\text{C}$	320 $\text{Å}^\circ\text{F}$	ASTM D648-45
Minimum Service Temperature, Air	-50.0 $\text{Å}^\circ\text{C}$	-58.0 $\text{Å}^\circ\text{F}$	
Flammability, UL94	V-0	V-0	
Oxygen Index	24 - 35 %	24 - 35 %	ASTM D2863

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.00\text{e}+16$ ohm-cm	$\geq 1.00\text{e}+16$ ohm-cm	ASTM D257
Surface Resistance	$\geq 1.00\text{e}+13$ ohm	$\geq 1.00\text{e}+13$ ohm	ASTM D257
Dielectric Constant	3.2	3.2	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	24.0 kV/mm	610 kV/in	ASTM D149
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Dielectric Loss Index	0.0030	0.0030	ASTM D150
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	

Compliance Properties	Metric	English	Comments
FDA	Yes	Yes	

Descriptive Properties	Value	Comments
Color	Natural	
UV Resistance	Y	

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