

Overview of materials for Polyetherketoneetherketoneketone (PEKEKK), Carbon Fiber Filled

Category : Polymer , Thermoplastic , Polyketone , Polyetherketoneetherketoneketone (PEKEKK), Carbon Fiber Filled

Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Polyetherketoneetherketoneketone (PEKEKK), Carbon Fiber Filled". Each property range of values reported is minimum and maximum values of appropriate MatWeb entries. The comments report the average value, and number of data points used to calculate the average. The values are not necessarily typical of any specific grade, especially less common values and those that can be most affected by additives or processing methods.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Overview-of-materials-for-Polyetherketoneetherketoneketone-PEKEKK-Carbon-Fiber-Filled.php

Physical Properties	Metric	English	Comments
Density	1.33 - 1.41 g/cc	0.0480 - 0.0509 lb/in ³	Average value: 1.38 g/cc Grade Count:4
Water Absorption	0.100 - 0.200 %	0.100 - 0.200 %	Average value: 0.140 % Grade Count:3
Water Absorption at Saturation	0.800 - 0.800 % @Temperature 100 - 100 °C	0.800 - 0.800 % @Temperature 212 - 212 °F	Average value: 0.800 % Grade Count:1
Viscosity	650000 - 650000 cP @Temperature 420 - 420 °C	650000 - 650000 cP @Temperature 788 - 788 °F	Average value: 650000 cP Grade Count:1
Linear Mold Shrinkage	0.000500 - 0.00200 cm/cm	0.000500 - 0.00200 in/in	Average value: 0.00107 cm/cm Grade Count:4
Linear Mold Shrinkage, Transverse	0.00700 - 0.0150 cm/cm	0.00700 - 0.0150 in/in	Average value: 0.0130 cm/cm Grade Count:4

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	183 - 270 MPa	26500 - 39200 psi	Average value: 238 MPa Grade Count:4
	70.0 - 180 MPa @Temperature 125 - 275 °C	10200 - 26100 psi @Temperature 257 - 527 °F	Average value: 123 MPa Grade Count:1
Elongation at Break	1.40 - 2.50 %	1.40 - 2.50 %	Average value: 1.88 % Grade Count:4
Modulus of Elasticity	12.4 - 28.0 GPa	1800 - 4060 ksi	Average value: 21.5 GPa Grade Count:4
Flexural Yield Strength	270 - 400 MPa	39200 - 58000 psi	Average value: 347 MPa Grade Count:4
	100 - 290 MPa	14500 - 42100 psi	

Mechanical Properties	Metric @ Temperature 125 - 275 °C	English @ Temperature 257 - 527 °F	Comments Average value: 193 MPa Grade Count:1
Flexural Modulus	6.90 - 23.5 GPa	1000 - 3410 ksi	Average value: 16.2 GPa Grade Count:4
Compressive Yield Strength	65.0 - 210 MPa @Temperature 120 - 250 °C	9430 - 30500 psi @Temperature 248 - 482 °F	Average value: 123 MPa Grade Count:1
Izod Impact, Notched	1.00 - 1.10 J/cm	1.87 - 2.06 ft-lb/in	Average value: 1.03 J/cm Grade Count:3
Izod Impact, Unnotched	8.00 - 9.10 J/cm	15.0 - 17.0 ft-lb/in	Average value: 8.53 J/cm Grade Count:3
K (wear) Factor	10100 x 10 ⁻⁸ mm ³ /N-M	5000 x 10 ⁻¹⁰ in ³ - min/ft-lb-hr	Average value: 10100 x 10 ^{<sup>- 8</sup>} mm ³ /N-M Grade Count:3

Thermal Properties	Metric	English	Comments
CTE, linear	13.0 - 95.0 μm/m-°C @Temperature >=162 °C	7.22 - 52.8 μin/in-°F @Temperature >=324 °F	Average value: 54.0 μm/m-°C Grade Count:1
Deflection Temperature at 1.8 MPa (264 psi)	271 - 383 °C	520 - 721 °F	Average value: 337 °C Grade Count:4
Flammability, UL94	V-0	V-0	Grade Count:3

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1e+05	1e+05	Grade Count:4

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