

## Overview of materials for Polyetherimide (PEI), Aramid Fiber Filled

Category : Polymer , Thermoplastic , Polyetherimide (PEI) , Polyetherimide (PEI), Aramid Fiber Filled

### Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Polyetherimide, Aramid 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-Polyetherimide-PEI-Aramid-Fiber-Filled.php](http://www.lookpolymers.com/polymer_Overview-of-materials-for-Polyetherimide-PEI-Aramid-Fiber-Filled.php)

Physical Properties	Metric	English	Comments
Density	1.28 - 1.38 g/cc	0.0462 - 0.0499 lb/in <sup>3</sup>	Average value: 1.32 g/cc Grade Count:7
Water Absorption	0.100 - 0.200 %	0.100 - 0.200 %	Average value: 0.183 % Grade Count:6
Linear Mold Shrinkage	0.00300 - 0.00700 cm/cm	0.00300 - 0.00700 in/in	Average value: 0.00479 cm/cm Grade Count:7

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	125	125	Average value: 125 Grade Count:3
Tensile Strength, Ultimate	82.7 - 100 MPa	12000 - 14500 psi	Average value: 91.9 MPa Grade Count:7
Elongation at Break	2.50 - 8.10 %	2.50 - 8.10 %	Average value: 4.80 % Grade Count:7
Modulus of Elasticity	3.03 - 4.83 GPa	439 - 700 ksi	Average value: 4.13 GPa Grade Count:7
Flexural Yield Strength	124 - 145 MPa	18000 - 21000 psi	Average value: 136 MPa Grade Count:7
Flexural Modulus	3.45 - 4.14 GPa	500 - 600 ksi	Average value: 3.89 GPa Grade Count:7
Izod Impact, Notched	0.267 - 0.534 J/cm	0.500 - 1.00 ft-lb/in	Average value: 0.450 J/cm Grade Count:7
Izod Impact, Unnotched	2.67 - 5.34 J/cm	5.00 - 10.0 ft-lb/in	Average value: 4.10 J/cm Grade Count:7

Thermal Properties	Metric	English	Comments
CTE, linear	25.2 - 30.6 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	14.0 - 17.0 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	Average value: 28.2 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$ Grade Count:3
Thermal Conductivity	0.231 - 0.245 W/m-K	1.60 - 1.70 BTU-in/hr-ft <sup>2</sup> -°F	Average value: 0.238 W/m-K Grade Count:4
Deflection Temperature at 0.46 MPa			

(56 psi) Thermal Properties	210 - 213 °C Metric	410 - 415 °F English	Average value: 212 °C Grade Count:5 Comments
Deflection Temperature at 1.8 MPa (264 psi)	185 - 204 °C	365 - 400 °F	Average value: 201 °C Grade Count:7
Flammability, UL94	V-0	V-0	Grade Count:6

Electrical Properties	Metric	English	Comments
Electrical Resistivity	1.00e+14 - 1.00e+16 ohm-cm	1.00e+14 - 1.00e+16 ohm-cm	Average value: 8.35e+15 ohm-cm Grade Count:6

Processing Properties	Metric	English	Comments
Processing Temperature	349 - 382 °C	660 - 720 °F	Average value: 366 °C Grade Count:5
Mold Temperature	121 - 177 °C	250 - 350 °F	Average value: 153 °C Grade Count:7
Injection Pressure	82.7 - 124 MPa	12000 - 18000 psi	Average value: 103 MPa Grade Count:6

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China