

## Overview of materials for PEKK, Reinforced

Category : Polymer , Thermoplastic , Polyketone , PEKK, Reinforced

### Material Notes:

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

| Physical Properties   | Metric                   | English                            | Comments                                   |
|-----------------------|--------------------------|------------------------------------|--------------------------------------------|
| Density               | 1.36 - 1.60 g/cc         | 0.0491 - 0.0578 lb/in <sup>3</sup> | Average value: 1.44 g/cc Grade Count:13    |
| Filler Content        | 20.0 - 40.0 %            | 20.0 - 40.0 %                      | Average value: 32.0 % Grade Count:5        |
| Water Absorption      | 0.0400 %                 | 0.0400 %                           | Average value: 0.0400 % Grade Count:4      |
| Linear Mold Shrinkage | 0.000500 - 0.00300 cm/cm | 0.000500 - 0.00300 in/in           | Average value: 0.00183 cm/cm Grade Count:9 |

| Mechanical Properties           | Metric            | English              | Comments                                |
|---------------------------------|-------------------|----------------------|-----------------------------------------|
| Tensile Strength, Ultimate      | 134 - 324 MPa     | 19500 - 47000 psi    | Average value: 216 MPa Grade Count:11   |
| Elongation at Break             | 1.20 - 2.50 %     | 1.20 - 2.50 %        | Average value: 1.65 % Grade Count:11    |
| Modulus of Elasticity           | 8.96 - 48.0 GPa   | 1300 - 6960 ksi      | Average value: 21.0 GPa Grade Count:10  |
| Flexural Yield Strength         | 214 - 448 MPa     | 31000 - 65000 psi    | Average value: 322 MPa Grade Count:11   |
| Flexural Modulus                | 7.58 - 31.0 GPa   | 1100 - 4500 ksi      | Average value: 17.3 GPa Grade Count:11  |
| Izod Impact, Notched            | 0.534 - 1.07 J/cm | 1.00 - 2.00 ft-lb/in | Average value: 0.749 J/cm Grade Count:9 |
| Izod Impact, Unnotched          | 4.81 - 9.40 J/cm  | 9.00 - 17.6 ft-lb/in | Average value: 6.95 J/cm Grade Count:7  |
| Coefficient of Friction         | 0.160 - 0.170     | 0.160 - 0.170        | Average value: 0.164 Grade Count:3      |
| Coefficient of Friction, Static | 0.218 - 0.250     | 0.218 - 0.250        | Average value: 0.229 Grade Count:3      |

| Thermal Properties | Metric              | English               | Comments                                  |
|--------------------|---------------------|-----------------------|-------------------------------------------|
| CTE, linear        | 9.00 - 45.0 µm/m-°C | 5.00 - 25.0 µin/in-°F | Average value: 20.0 µm/m-°C Grade Count:4 |

| Thermal Properties                          | Metric<br>°C | English<br>°F | Comments                            |
|---------------------------------------------|--------------|---------------|-------------------------------------|
| Deflection Temperature at 1.8 MPa (264 psi) | 260 - 327 °C | 500 - 621 °F  | Average value: 350 °C Grade Count:8 |
| Glass Transition Temp, Tg                   | 160 °C       | 320 °F        | Average value: 160 °C Grade Count:4 |
| Flammability, UL94                          | V-0          | V-0           | Grade Count:7                       |

| Processing Properties | Metric        | English           | Comments                              |
|-----------------------|---------------|-------------------|---------------------------------------|
| Melt Temperature      | 377 - 382 °C  | 710 - 720 °F      | Average value: 379 °C Grade Count:3   |
| Mold Temperature      | 149 - 232 °C  | 300 - 450 °F      | Average value: 204 °C Grade Count:5   |
| Drying Temperature    | 149 °C        | 300 °F            | Average value: 149 °C Grade Count:3   |
| Moisture Content      | 0.100 %       | 0.100 %           | Average value: 0.100 % Grade Count:3  |
| Dew Point             | -28.9 °C      | -20.0 °F          | Average value: -28.9 °C Grade Count:3 |
| Injection Pressure    | 103 - 138 MPa | 15000 - 20000 psi | Average value: 121 MPa Grade Count:5  |

## 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