

Overview of materials for Thermoplastic Polyimide, Unfilled

Category : Polymer , Thermoplastic , Polyimide, Thermoplastic , Thermoplastic Polyimide, Unfilled

Material Notes:

Order this product through the following link:

http://www.lookpolymers.com/polymer_Overview-of-materials-for-Thermoplastic-Polyimide-Unfilled.php

Physical Properties	Metric	English	Comments
Density	1.21 - 1.34 g/cc	0.0437 - 0.0484 lb/in ³	Average value: 1.29 g/cc Grade Count:8
Linear Mold Shrinkage	0.00830 - 0.0120 cm/cm	0.00830 - 0.0120 in/in	Average value: 0.00953 cm/cm Grade Count:3
Melt Flow	1.21 - 24.2 g/10 min	1.21 - 24.2 g/10 min	Average value: 9.36 g/10 min Grade Count:4

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	58.6 - 92.2 MPa	8500 - 13400 psi	Average value: 80.9 MPa Grade Count:7
	57.9 - 57.9 MPa @Temperature 150 - 150 °C	8400 - 8400 psi @Temperature 302 - 302 °F	Average value: 57.9 MPa Grade Count:1
Tensile Strength, Yield	57.916 - 57.916 MPa @Temperature 149 - 149 °C	8400.0 - 8400.0 psi @Temperature 300 - 300 °F	Average value: 57.9 MPa Grade Count:1
Elongation at Break	1.80 - 90.0 %	1.80 - 90.0 %	Average value: 17.0 % Grade Count:7
	90.0 - 90.0 % @Temperature 150 - 150 °C	90.0 - 90.0 % @Temperature 302 - 302 °F	Average value: 90.0 % Grade Count:1
Elongation at Yield	90.0 - 90.0 % @Temperature 149 - 149 °C	90.0 - 90.0 % @Temperature 300 - 300 °F	Average value: 90.0 % Grade Count:1
Modulus of Elasticity	2.41 - 4.50 GPa	350 - 653 ksi	Average value: 3.73 GPa Grade Count:7
Flexural Yield Strength	77.2 - 137 MPa	11200 - 19900 psi	Average value: 110 MPa Grade Count:5
	88.2529 - 88.3 MPa @Temperature 149 - 150 °C	12800.0 - 12800 psi @Temperature 300 - 302 °F	Average value: 88.3 MPa Grade Count:2
Flexural Modulus	2.94 - 3.79 GPa	426 - 550 ksi	Average value: 3.27 GPa Grade Count:5

Mechanical Properties	Metric	English	Comments
	2.55037 GPa	369.906 ksi	Average value: 2.55 GPa Grade Count:2
	@Temperature 149 - 150 °C	@Temperature 300 - 302 °F	
Compressive Yield Strength	76.4919 - 76.5318 MPa	11094.2 - 11100.0 psi	Average value: 76.5 MPa Grade Count:2
	@Temperature 149 - 150 °C	@Temperature 300 - 302 °F	
Shear Strength	78.5 - 78.5 MPa	11400 - 11400 psi	Average value: 78.5 MPa Grade Count:1
	@Temperature 150 - 150 °C	@Temperature 302 - 302 °F	
Izod Impact, Notched	0.883 - 1.12 J/cm	1.65 - 2.10 ft-lb/in	Average value: 0.970 J/cm Grade Count:3
Charpy Impact Unnotched	2.00 J/cm ²	9.52 ft-lb/in ²	Average value: 2.00 J/cm ² Grade Count:3

Thermal Properties	Metric	English	Comments
CTE, linear	54.0 - 55.0 µm/m-°C	30.0 - 30.6 µin/in-°F	Average value: 54.5 µm/m-°C Grade Count:2
	@Temperature 73.0 - 200 °C	@Temperature 163 - 392 °F	
CTE, linear, Transverse to Flow	55.0 - 55.0 µm/m-°C	30.6 - 30.6 µin/in-°F	Average value: 55.0 µm/m-°C Grade Count:1
	@Temperature 200 - 200 °C	@Temperature 392 - 392 °F	
Specific Heat Capacity	1.00 - 1.42256 J/g-°C	0.239 - 0.340000 BTU/lb-°F	Average value: 1.21 J/g-°C Grade Count:2
	@Temperature 100 - 300 °C	@Temperature 212 - 572 °F	
Deflection Temperature at 0.46 MPa (66 psi)	145 - 252 °C	293 - 485 °F	Average value: 200 °C Grade Count:4
Vicat Softening Point	130 - 170 °C	266 - 338 °F	Average value: 150 °C Grade Count:3
Flammability, UL94	HB - 5VA	HB - 5VA	Grade Count:5

Optical Properties	Metric	English	Comments
Refractive Index	1.51 - 1.54	1.51 - 1.54	Average value: 1.53 Grade Count:3
Transmission, Visible	90.0 %	90.0 %	Average value: 90.0 % Grade Count:3

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