

Overview of materials for Phenolic, Resole, Mineral/Flock Filled

Category : Polymer , Thermoset , Phenolic , Phenolic, Resole, Mineral/Flock Filled

Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Phenolic, Resole, Mineral/Flock 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-Phenolic-Resole-MineralFlock-Filled.php

Physical Properties	Metric	English	Comments
Density	1.56 - 1.59 g/cc	0.0564 - 0.0574 lb/in ³	Average value: 1.58 g/cc Grade Count:3
Water Absorption	0.400 - 0.560 %	0.400 - 0.560 %	Average value: 0.477 % Grade Count:3
Linear Mold Shrinkage	0.00340 - 0.00530 cm/cm	0.00340 - 0.00530 in/in	Average value: 0.00430 cm/cm Grade Count:3

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell E	57.0 - 67.0	57.0 - 67.0	Average value: 62.0 Grade Count:3
Tensile Strength, Ultimate	51.1 - 58.0 MPa	7410 - 8410 psi	Average value: 54.0 MPa Grade Count:3
Elongation at Break	0.800 - 1.11 %	0.800 - 1.11 %	Average value: 0.920 % Grade Count:3
Modulus of Elasticity	8.70 - 10.1 GPa	1260 - 1460 ksi	Average value: 9.43 GPa Grade Count:3
Flexural Yield Strength	79.0 - 83.0 MPa	11500 - 12000 psi	Average value: 80.5 MPa Grade Count:3
Flexural Modulus	8.01 - 9.20 GPa	1160 - 1330 ksi	Average value: 8.60 GPa Grade Count:3
Compressive Yield Strength	139 - 163 MPa	20200 - 23600 psi	Average value: 155 MPa Grade Count:3
Izod Impact, Notched	0.190 - 0.271 J/cm	0.356 - 0.508 ft-lb/in	Average value: 0.224 J/cm Grade Count:3
Charpy Impact, Notched	0.205 - 0.251 J/cm ²	0.976 - 1.19 ft-lb/in ²	Average value: 0.222 J/cm ² Grade Count:3

Thermal Properties	Metric	English	Comments
CTE, linear	34.0 - 34.0 $\mu\text{m}/\text{m}^\circ\text{C}$ @Temperature 40.0 - 130 °C	18.9 - 18.9 $\mu\text{in}/\text{in}^\circ\text{F}$ @Temperature 104 - 266 °F	Average value: 34.0 $\mu\text{m}/\text{m}^\circ\text{C}$ Grade Count:1

Thermal Properties	Metric	English	Comments
Thermal Conductivity	0.550 W/m-K @Temperature 100 - 100 °C	82 BTU-in/hr- ft ² -°F @Temperature 212 - 212 °F	Average value: 0.550 W/m-K Grade Count:1
Maximum Service Temperature, Air	188 - 210 °C	370 - 410 °F	Average value: 200 °C Grade Count:3
Deflection Temperature at 1.8 MPa (264 psi)	199 - 240 °C	390 - 464 °F	Average value: 214 °C Grade Count:3
Flammability, UL94	V-1 - V-0	V-1 - V-0	Grade Count:3

Electrical Properties	Metric	English	Comments
Electrical Resistivity	2.02e+11 - 1.70e+12 ohm-cm	2.02e+11 - 1.70e+12 ohm-cm	Average value: 7.97e+11 ohm-cm Grade Count:3
Dielectric Constant	6.50 - 7.90	6.50 - 7.90	Average value: 7.40 Grade Count:3
Dielectric Strength	6.90 - 9.40 kV/mm	175 - 239 kV/in	Average value: 7.90 kV/mm Grade Count:3
Dissipation Factor	0.0990 - 0.162	0.0990 - 0.162	Average value: 0.127 Grade Count:3
Arc Resistance	181 - 190 sec	181 - 190 sec	Average value: 185 sec Grade Count:3
Comparative Tracking Index	175 - 200 V	175 - 200 V	Average value: 192 V 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