

Overview of materials for Phenolic, Novolac, Mineral/Cellulose Filled

Category : Polymer , Thermoset , Phenolic , Phenolic, Novolac, Mineral/Cellulose Filled

Material Notes:

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

Physical Properties	Metric	English	Comments
Density	1.54 - 1.57 g/cc	0.0556 - 0.0567 lb/in ³	Average value: 1.56 g/cc Grade Count:5
Water Absorption	0.163 - 0.224 %	0.163 - 0.224 %	Average value: 0.201 % Grade Count:5
Linear Mold Shrinkage	0.00283 - 0.00760 cm/cm	0.00283 - 0.00760 in/in	Average value: 0.00493 cm/cm Grade Count:5

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell E	77.0 - 84.0	77.0 - 84.0	Average value: 80.2 Grade Count:5
Tensile Strength, Ultimate	44.0 - 55.0 MPa	6380 - 7980 psi	Average value: 50.6 MPa Grade Count:5
Elongation at Break	0.440 - 0.700 %	0.440 - 0.700 %	Average value: 0.596 % Grade Count:5
Modulus of Elasticity	9.90 - 11.3 GPa	1440 - 1640 ksi	Average value: 10.4 GPa Grade Count:5
Flexural Yield Strength	74.0 - 92.0 MPa	10700 - 13300 psi	Average value: 81.2 MPa Grade Count:5
Flexural Modulus	8.60 - 10.5 GPa	1250 - 1520 ksi	Average value: 9.44 GPa Grade Count:5
Compressive Yield Strength	162 - 195 MPa	23500 - 28300 psi	Average value: 177 MPa Grade Count:5
Izod Impact, Notched	0.160 - 0.202 J/cm	0.300 - 0.378 ft-lb/in	Average value: 0.175 J/cm Grade Count:5
Charpy Impact, Notched	0.168 - 0.215 J/cm ²	0.800 - 1.02 ft-lb/in ²	Average value: 0.195 J/cm ² Grade Count:5

Thermal Properties	Metric	English	Comments
CTE, linear	46.0 - 52.0 µm/m-°C @Temperature 40.0 - 130 °C	25.6 - 28.9 µin/in-°F @Temperature 104 - 266 °F	Average value: 48.0 µm/m-°C Grade Count:3

Thermal Properties	Metric	English	Comments
Thermal Conductivity	0.540 - 0.540 W/m-K @Temperature 100 - 100 °C	0.75 - 0.75 BTU-in/hr- sq-ft °F @Temperature 212 - 212 °F	Average value: 0.540 W/m-K Grade Count:2
Maximum Service Temperature, Air	196 - 203 °C	385 - 397 °F	Average value: 201 °C Grade Count:5
Deflection Temperature at 1.8 MPa (264 psi)	173 - 197 °C	343 - 387 °F	Average value: 187 °C Grade Count:5
Flammability, UL94	V-0	V-0	Grade Count:5
Oxygen Index	28.0 - 33.0 %	28.0 - 33.0 %	Average value: 30.7 % Grade Count:3

Electrical Properties	Metric	English	Comments
Electrical Resistivity	3.00e+11 - 3.00e+12 ohm-cm	3.00e+11 - 3.00e+12 ohm-cm	Average value: 1.39e+12 ohm-cm Grade Count:5
Dielectric Constant	5.10 - 5.70	5.10 - 5.70	Average value: 5.40 Grade Count:5
Dielectric Strength	6.60 - 14.9 kV/mm	168 - 378 kV/in	Average value: 11.3 kV/mm Grade Count:5
Dissipation Factor	0.0380 - 0.0740	0.0380 - 0.0740	Average value: 0.0542 Grade Count:5
Arc Resistance	171 - 182 sec	171 - 182 sec	Average value: 178 sec Grade Count:5
Comparative Tracking Index	175 - 200 V	175 - 200 V	Average value: 180 V Grade Count:5

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