

TYPICAL PROPERTIES OF NATURAL PEEK

| Property | Test Method | U.S. Units | SI Units |
|-------------------------------------|-------------|--------------|-----------------------------|
| Mechanical Properties | | | |
| Tensile Strength | ASTM D 638 | 13,800 psi | 95 MPa |
| Tensile Modulus | ASTM D 638 | 510,000 psi | 3,500 MPa |
| Tensile Elongation at Yield | ASTM D 638 | 5.20% | 5.20% |
| Tensile Elongation at Break | ASTM D 638 | 20% - 30% | 20% - 30% |
| Flexural Strength | ASTM D 790 | 21,200 psi | 146 MPa |
| Flexural Modulus | ASTM D 790 | 540,000 psi | 3,700 MPa |
| Izod Impact, Notched | ASTM D 256 | 1.3 ft-lb/in | 70 J/m |
| Izod Impact, Unnotched | ASTM D 4812 | No Break | No Break |
| Physical Properties | | | |
| Water Absorption | ASTM D 570 | 0.10% | 0.10% |
| Specific Gravity | ASTM D 792 | 1.3 | 1.3 |
| Thermal Properties | | | |
| Heat Deflection Temperature | ASTM D 648 | 315°F | 157°C |
| Glass Transition Temperature | ASTM D 3417 | 302°F | 150°C |
| Electrical Properties | | | |
| Dielectric Strength | IEC 248 | - | 190 kV/mm ⁻¹ |
| Dielectric Constant (50Hz 0-150° C) | IEC 250 | - | 3.2 |
| Volume Resistivity | IEC 93 | - | 4.9 x 10 ¹⁶ Ω cm |

For inquires or additional information, please call: 1 (281) 255-6855

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