

## Polysulfone - Extruded Products

<b>Physical Properties</b>	Metric	English	Comments
Density	1.24 g/cc	0.0448 lb/in <sup>3</sup>	ASTM D792
Water Absorption	0.300 %	0.300 %	24 hrs.; ASTM D570
<b>Mechanical Properties</b>	Metric	English	Comments
Hardness, Rockwell R	120	120	ASTM D785
Tensile Strength, Ultimate	69.8 MPa	10100 psi	ASTM D638
Elongation at Break	50.0 - 100 %	50.0 - 100 %	ASTM D638
Tensile Modulus	2.48 GPa	360 ksi	ASTM D638
Flexural Modulus	2.70 GPa	392 ksi	1% Secant; ASTM D790
Flexural Yield Strength	106.2 MPa	15400 psi	ASTM D790
Coefficient of Friction	0.370	0.370	Dynamic, 40 psi, 50 fpm; ASTM D3702
Izod Impact, Notched	0.690 J/cm	1.29 ft-lb/in	ASTM D256
<b>Electrical Properties</b>	Metric	English	Comments
Electrical Resistivity	5.00e+16 ohm-cm	5.00e+16 ohm-cm	ASTM D257
Dielectric Constant	3.10	3.10	60 Hz, 50% RH; ASTM D150
Dielectric Constant, Low Frequency	3.10	3.10	60 Hz, 50% RH; ASTM D150
Dielectric Strength	16.5 kV/mm	419 kV/in	ASTM D149
Dissipation Factor	0.00100	0.00100	60 Hz; ASTM D150
<b>Thermal Properties</b>	Metric	English	Comments
CTE, linear	55.8 Åµm/m-°C @Temperature 20.0 °C	31.0 Åµin/in-°F @Temperature 68.0 Å°F	ASTM D696
Maximum Service Temperature, Air	141 °C	286 °F	Long Term
	171 °C	340 °F	Short Term
Deflection Temperature at 0.46 MPa (66 psi)	181 °C	358 °F	ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	174 °C	345 °F	ASTM D648
Flammability, UL94	V-0	V-0	

PENS03

