

Physical Properties	Metric	English	Comments
Density	1.03 - 1.07 g/cc	0.0372 - 0.0387 lb/in <sup>3</sup>	Average = 1.05 g/cc; Grade Count = 30
Water Absorption	<a href="#">0.3 %</a>	0.3 %	Grade Count = 3
Linear Mold Shrinkage	0.005 - 0.0165 cm/cm	0.005 - 0.0165 in/in	Average = 0.0069 cm/cm; Grade Count = 28
Melt Flow	1 - 8 g/10 min	1 - 8 g/10 min	Average = 3.6 g/10 min; Grade Count = 30

### Mechanical Properties

Hardness, Rockwell R	101 - 115	101 - 115	Average = 110; Grade Count = 16
Tensile Strength, Ultimate	31 - 55 MPa	4500 - 7980 psi	Average = 41.9 MPa; Grade Count = 13
Tensile Strength, Yield	37.2 - 50 MPa	5400 - 7250 psi	Average = 43.4 MPa; Grade Count = 25
Elongation at Break	10 - 70 %	10 - 70 %	Average = 32.5%; Grade Count = 16
Elongation at Yield	2.1 - 2.8 %	2.1 - 2.8 %	Average = 2.4%; Grade Count = 12
Tensile Modulus	1.79 - 2.7 GPa	260 - 392 ksi	Average = 2.2 GPa; Grade Count = 24
Flexural Modulus	2.07 - 2.69 GPa	300 - 390 ksi	Average = 2.4 GPa; Grade Count = 17
Flexural Yield Strength	63.4 - 86 MPa	9200 - 12500 psi	Average = 74.9 MPa; Grade Count = 17
Compressive Yield Strength	<a href="#">70 MPa</a>	10200 psi	Grade Count=1
Izod Impact, Notched	1.175 - 5.34 J/cm	2.2 - 10 ft-lb/in	Average = 2.2 J/cm;

			Grade Count = 31
Izod Impact, Notched Low Temp	0.4 - 0.9 J/cm	0.749 - 1.69 ft-lb/in	Average = 0.57 J/cm; Grade Count = 4
Charpy Impact, Unnotched	NB	NB	Grade Count = 13
Charpy Impact, Notched Low Temp	0.7 - 1.6 J/cm <sup>2</sup>	3.33 - 7.61 ft-lb/in <sup>2</sup>	Average = 0.915 J/cm <sup>2</sup> ; Grade Count = 13
Charpy Impact, Unnotched Low Temp	6 - NB	28.6 - NB	Average = 14.6 J/cm <sup>2</sup> (NB computed as 20 J/cm <sup>2</sup> ); Grade Count = 13
Charpy Impact, Notched	1.3 - 6.3 J/cm <sup>2</sup>	6.19 - 30 ft-lb/in <sup>2</sup>	Average = 2.5 J/cm <sup>2</sup> ; Grade Count = 13

### Electrical Properties

Dielectric Constant	2.9	2.9	Grade Count = 1
Dielectric Constant, Low Frequency	2.9	2.9	Grade Count = 1
Dielectric Strength	<a href="#">15 kV/mm</a>	381 kV/in	Grade Count = 1
Dissipation Factor	0.035	0.035	Grade Count = 1
Dissipation Factor, Low Frequency	0.035	0.035	Grade Count = 1

### Thermal Properties

CTE, linear 20°C	67 - 102 µm/m-°C	37.2 - 56.7 µin/in-°F	Average = 83.2 µm/m- °C; Grade Count=19
Specific Heat Capacity	1.6 - 2.03 J/g-°C	0.382 - 0.485 BTU/lb-°F	Average = 1.9 J/g-K; Grade Count = 4
Thermal Conductivity	0.128 - 0.3 W/m-K	0.888 - 2.08 BTU-in/hr-ft <sup>2</sup> -°F	Average = 0.18 W/m- K; Grade Count = 4
Maximum Service Temperature, Air	76.7 - 118 °C	170 - 244 °F	Average =

			93.2°C; Grade Count = 28
Deflection Temperature at 0.46 MPa (66 psi)	91 - 122 °C	196 - 252 °F	Average = 100°C; Grade Count=25
Deflection Temperature at 1.8 MPa (264 psi)	76.7 - 119 °C	170 - 246 °F	Average = 93.3°C; Grade Count=30
Vicat Softening Point	104 - 128.8 °C	219 - 264 °F	Average = 110°C; Grade Count = 19
Glass Temperature	<a href="#">120 °C</a>	248 °F	Grade Count = 1
UL RTI, Electrical	<a href="#">60 °C</a>	140 °F	Grade Count = 6
UL RTI, Mechanical with Impact	<a href="#">60 °C</a>	140 °F	Grade Count = 6
UL RTI, Mechanical without Impact	<a href="#">60 °C</a>	140 °F	Grade Count = 6
Flammability, UL94	HB	HB	Grade Count = 11

### Optical Properties

Gloss	40 - 95 %	40 - 95 %	Average = 66.2%; Grade Count = 8
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### Processing Properties

Processing Temperature	230 - 260 °C	446 - 500 °F	Average = 250°C; Grade Count = 8
Rear Barrel Temperature	<a href="#">250 °C</a>	482 °F	Grade Count = 2
Middle Barrel Temperature	<a href="#">250 °C</a>	482 °F	Grade Count = 2
Front Barrel Temperature	<a href="#">250 °C</a>	482 °F	Grade Count = 2
Nozzle Temperature	<a href="#">250 °C</a>	482 °F	Grade Count = 2
Mold Temperature	58 - 65 °C	136 - 149 °F	Average = 63°C; Grade Count = 7
Drying Temperature	77 - 96 °C	171 - 205 °F	Average = 90.6°C; Grade

