



## PETG

### General Material Properties

Property	Metric	units	English	units
<b>General</b>				
Density	1.26e3 - 1.28e3	kg/m <sup>3</sup>	0.0455 - 0.0462	lb/ft <sup>3</sup>
<b>Mechanical</b>				
Yield Strength	4.79e7 - 5.29e7	Pa	6.95 - 7.67	ksi
Tensile Strength	6e7 - 6.6e7	Pa	8.7 - 9.57	ksi
Elongation	1.02 - 1.18	% strain	102 - 118	% strain
Hardness (Vickers)	1.41e8 - 1.56e8	Pa	14.4 - 15.9	HV
Impact Strength (unnotched)	1.9e5 - 2e5	J/m <sup>2</sup>	90.4 - 95.2	ft.lbf/in <sup>2</sup>
Fracture Toughness	2.11e6 - 2.54e6	Pa/m <sup>0.5</sup>	1.92 - 2.31	ksi/in <sup>0.5</sup>
Young's Modulus	2.01e9 - 2.11e9	Pa	0.292 - 0.306	10 <sup>6</sup> psi
<b>Thermal</b>				
Max Service Temperature	51 - 64	°C	124 - 147	°F
Melting Temperature	81 - 91	°C	178 - 196	°F
Insulator or Conductor	Insulator		Insulator	
Specific Heat Capability	1.47e3 - 1.53e3	J/kg °C	0.352 - 0.366	BTU/lb. °F
Thermal Expansion Coefficient	1.2e-4 - 1.23e-4	strain/°C	66.8 - 68.1	μstrain/°F
<b>Eco</b>				
CO2 Footprint	3.22 - 3.56	kg/kg	3.22 - 3.56	lb/lb
Recycleable	Yes		Yes	

The information on this page is intended as general guidance only and is only accurate at the time of posting (7-30-12). Specific material properties vary by manufacturer. Please contact a Dielectric application engineer for help in choosing the optimal material for your application and budget.