



PVC (Polyvinyl Chloride) General Material Properties

Property	Metric	units	English	units
General				
Density	1.3e3 - 1.49e3	kg/m ³	0.047 - 0.0538	lb/ft ³
Mechanical				
Yield Strength	4.14e7 - 5.27e7	Pa	6 - 7.64	ksi
Tensile Strength	4.14e7 - 5.27e7	Pa	6 - 7.64	ksi
Elongation	0.4 - 0.8	% strain	40 - 80	% strain
Hardness (Vickers)	1.22e8 - 1.55e8	Pa	12.4 - 15.8	HV
Impact Strength (unnotched)	1.9e5 - 2e5	J/m ²	90.4 - 95.2	ft.lbf/in ²
Fracture Toughness	3.63e6 - 3.85e6	Pa/m ^{0.5}	3.3 - 3.5	ksi/in ^{0.5}
Young's Modulus	2.48e9 - 3.3e9	Pa	0.36 - 0.479	10 ⁶ psi
Thermal				
Max Service Temperature	50 - 65	°C	122 - 149	°F
Insulator or Conductor	Insulator		Insulator	
Specific Heat Capability	1e3 - 1.1e3	J/kg °C	0.239 - 0.263	BTU/lb. °F
Thermal Expansion Coefficient	9e-5 - 1.8e-4	strain/°C	50 - 100	μstrain/°F
Eco				
CO2 Footprint	1.85 - 2.04	kg/kg	1.85 - 2.04	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.