



Radel® (Polyvinyl Chloride)

General Material Properties

Property	Metric	units	English	units
General				
Density	1.29e3 - 1.3e3	kg/m ³	0.0466 - 0.047	lb/ft ³
Mechanical				
Yield Strength	5.3e7 - 5.85e7	Pa	7.69 - 8.48	ksi
Tensile Strength	6.63e7 - 7.31e7	Pa	9.62 - 10.6	ksi
Elongation	0.558 - 0.645	% strain	55.8 - 64.5	% strain
Hardness (Vickers)	1.56e8 - 1.72e8	Pa	15.9 - 17.5	HV
Impact Strength (notched)	1.1e4 - 1.22e4	J/m ²	5.23 - 5.81	ft.lbf/in ²
Fracture Toughness	2.65e6 - 6.08e6	Pa/m ^{0.5}	2.41 - 5.53	ksi/in ^{0.5}
Young's Modulus	2.29e9 - 2.4e9	Pa	0.332 - 0.348	10 ⁶ psi
Thermal				
Max Service Temperature	168 - 186	°C	334 - 367	°F
Insulator or Conductor	Insulator		Insulator	
Specific Heat Capability	1.45e3 - 1.51e3	J/kg °C	0.347 - 0.361	BTU/lb. °F
Thermal Expansion Coefficient	5.1e-5 - 6.1e-5	strain/°C	28.3 - 33.9	μstrain/°F
Eco				
CO2 Footprint	1.77 - 1.8	kg/kg	1.77 - 1.8	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 (8-16-12). Specific material properties vary by manufacturer. Please contact a Dielectric application engineer for help in choosing the optimal material for your application and budget.