



Kynar®(Polyvinylidene Fluoride)

General Material Properties

Property	Metric	units	English	units
General				
Density	1.77e3 - 1.78e3	kg/m ³	0.0639 - 0.0643	lb/ft ³
Mechanical				
Yield Strength	2.3e7 - 5e7	Pa	3.34 - 7.25	ksi
Tensile Strength	2.41e7 - 5e7	Pa	3.5 - 7.25	ksi
Elongation	0.12 - 6	% strain	12 - 600	% strain
Hardness (Vickers)	6.77e7 - 1.47e8	Pa	6.9 - 15	HV
Impact Strength (unnotched)	1.33e5 - 2e5	J/m ²	63.3 - 95.2	ft.lbf/in ²
Fracture Toughness	2.39e6 - 2.86e6	Pa/m ^{0.5}	2.17 - 2.61	ksi/in ^{0.5}
Young's Modulus	2e9 - 2.5e9	Pa	0.29 - 0.363	10 ⁶ psi
Thermal				
Max Service Temperature	157 - 175	°C	315 - 347	°F
Melting Temperature	141 - 178	°C	286 - 352	°F
Insulator or Conductor	Insulator		Insulator	
Specific Heat Capability	1.17e3 - 1.21e3	J/kg °C	0.279 - 0.29	BTU/lb. °F
Thermal Expansion Coefficient	1.26e-4 - 2.56e-4	strain/°C	70 - 142	μstrain/°F
Eco				
CO2 Footprint	6.69 - 7.4	kg/kg	6.69 - 7.4	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.