



## Acetal

### General Material Properties

Property	Metric	units	English	units
<b>General</b>				
Density	1.39e3 - 1.43e3	kg/m <sup>3</sup>	86.8 - 89.3	lb/ft <sup>3</sup>
<b>Mechanical</b>				
Yield Strength	2.86e7 - 7.24e7	Pa	7.05 - 10.5	ksi
Tensile Strength	6e7 - 8.96e7	Pa	8.7 - 13	ksi
Elongation	0.1 - 0.75	% strain	10.0 - 75.0	% strain
Hardness (Vickers)	1.43e8 - 2.43e8	Pa	14.6 - 24.8	HV
Fracture Toughness	1.71e6 - 4.2e6	Pa/m <sup>0.5</sup>	1.55 - 3.82	ksi/in <sup>0.5</sup>
Young's Modulus	2.5e9 - 5e9	Pa	0.363e6 - 0.725e6	10 <sup>6</sup> psi
<b>Thermal</b>				
Max Service Temperature	76.9 - 96.9	°C	170 - 206	°F
Melting Temperature	160 - 184	°C	320 - 363	°F
Insulator or Conductor	Insulator		Insulator	
Specific Heat Capability	1.36e3 - 1.43e3	J/kg °C	0.326 - 0.342	BTU/lb. °F
Thermal Expansion Coefficient	7.57e-5 - 2.02e-4	strain/°C	42.1 - 112	μstrain/°F
<b>Eco</b>				
CO2 Footprint	3.8 - 4.2	kg/kg	3.8 - 4.2	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.