

# Celazole® TF-60V

## Glass Fiber Reinforced Melt Processable PBI

### Typical Properties

PROPERTIES	ASTM METHOD	ENGLISH VALUE	METRIC VALUE
<b>MECHANICAL</b>			
Tensile Strength	D-638	22 kpsi	150 MPa
Modulus		1750 kpsi	12,000 MPa
Elongation		1.4%	1.4%
Flexural Strength	D-790	32.6 kpsi	225 MPa
Modulus		1810 kpsi	12,500 MPa
Compressive Strength	D-695	32 kpsi	220 MPa
Modulus		530 kpsi	3600 MPa
<b>ELECTRICAL</b>			
Dielectric Strength	D-149	410 V/mil	16 KV/mm
Volume Resistivity	D-257	1 X 10 <sup>16</sup> ohm-cm	1 X 10 <sup>16</sup> ohm-cm
Dissipation Factor			
1 kHz	D-150	0.000	0.000
10 kHz	D-150	0.001	0.001
Dielectric Constant			
1 kHz	D-150	3.9	3.9
10 kHz	D-150	3.9	3.9
Arc Resistance	D-495	180 seconds	180 seconds
<b>THERMAL</b>			
Coefficient of Linear Thermal Expansion			
75-300°F	TMA	9 x 10 <sup>-6</sup> in/in°F	17 µm/m°C
Heat Capacity @ 158°F	DSC	0.27 Btu/lb°F	1130 J/Kg°C
Heat Deflection Temperature @ 264 psi	D-648	590°F	310°C
Temp. of Initial (5%) Weight Loss In:			
Air	TGA	1125°F	607°C
Nitrogen	TGA	1175°F	635°C
Thermal Conductivity @ 75°F	F-433	2.5 Btu in/hr•ft <sup>2</sup> °F	0.31 kcal/mh°C
<b>OTHER</b>			
Specific Gravity		1.52	1.52
Hardness, Rockwell A	D-785	30	30
Poisson's Ratio		0.34	0.34
Water Absorption			
24 hours @ 73°F	D-570	0.25 %	0.25 %
@ Equilibrium	D-570	4.6 %	4.6 %

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