



LEHIGH VALLEY PLASTICS

We Shape The Industry

Celazole® PBI U-60

MECHANICAL PROPERTIES	ASTEM METHOD	ENGLISH VALUE	METRIC VALUE
Tensile Strength	D-638	23 kpsi	160 MPa
Modulus		850 kpsi	5900 MPa
Elongation		3.0%	3.0 %
Tensile Fatigue, % of stress to failure at 1,000,000 cycles, 1 Hz	D-638	35% (8.1 kpsi)	35% (56 MPa)
Flexural Strength	D-790	32 kpsi	220 MPa
Modulus		950 kpsi	6500 MPa
Compressive Strength (Yield)	D-695	57 kpsi	390 MPa
Compressive Strength (10% Strain)	D-695	50 kpsi	340 MPa
Compressive Modulus	D-695	850 kpsi	5900 MPa
Harness - Rockwell M	D-785	>125	>125
– Rockwell E	D-785	104	104
– Shore D	D-2240	95	95
Izod Impact Strength (notched)	D-256	.53 ft-lb/in	30 J/m
(unnotched)		11 ft-lb/in	590 J/m
THERMAL PROPERTIES			
Heat Deflection Temp. (264 psi; 1.8 MPa)	D-648	815°F	435°C
Glass Transition	DMA	800°	427°C
Coefficient of Linear Thermal Expansion			
75-300°F (25-150°C)	TMA	13 x 10 ⁻⁶ in/in°F	23 μm/m°C
390-570°F (200-300°C)	TMA	18 X 10 ⁻⁶ in/in°F	33 μm/m°C
Limiting Oxygen Index	D-2863	58%	58%
Thermal Conductivity 77°F (25°C)		2.8 Btu-in/hr-ft ² F	0.41 W/m°C
ELECTRICAL PROPERTIES			
Dielectric Strength	D-149	580 V/mil	23 KV/mm
Volume Resistivity	D-257	2 X 10 ¹⁵ ohm-cm	2 X 10 ¹⁵ ohm-cm
Dissipation Factor			
1 kHz	D-150	0.000	0.000
10 kHz	D-150	0.003	0.003
0.1 MHz	D-150	0.034	0.034
Dielectric Constant			
1 kHz	D-150	3.4	3.4
10 kHz	D-150	3.4	3.4
0.1 MHz	D-150	3.3	3.3
Arc Resistance	D-495	185 sec.	185 sec.

IMPORTANT: The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy or suitability for particular applications or the results to be obtained therefrom. Lehigh Valley Plastics, Inc. will not be held responsible for the use of this information relative to actual application.