

Transparents Plastics

	ACRYLIC	BUTYRATE	LEXAN	PETG	CLR. PVC
PHYSICAL					
SPECIFIC GRAVITY	1.18	1.19	1.2	1.2	1.38
WATER ABSORPTION, 24 hr. (%)	0.2 - 0.4	2.0 - 7.0	.15 - .18		0.04
MECHANICAL					
TENSILE					
Strength, Yield (10 ³ psi) @ 73°F	8.0 - 11.0	2.6 - 6.9	8.0 - 95.0	7.1	10.2
Elongation, Ultimate (%) @ 73°F	2.0 - 7.0	50 - 100	100 - 130	180	36
Modulus, Yield (10 ³ psi) @ 73°F	350 - 450	200 - 250	300 - 350		426
FLEXURAL					
Strength, (10 ³ psi) @ 73°F	12 - 17	4.0 - 9.0	12.2 - 12.7	10.0	
Modulus, Yield (10 ³ psi) @ 73°F	390 - 475	55 - 185	320 - 350		
COMPRESSIVE STRENGTH					
2% Offset, (10 ³ psi)					
IMPACT STRENGTH					
Izod, Notched (ft.-lb./in.) @ 73°F		0.8 - 6.3			0.52
HARDNESS					
Coefficient OF static friction	M80 - M100	R130 - R115	R115 - R115	R105	R115
Against self					
Against steel					
THERMAL					
CONDUCTIVITY					
(BTU/Hr/Sq.Ft./°F/in.)					
COEFFICIENT OF THERMAL EXPANSION					
(10 ⁻⁵ /°F)					
SPECIFIC HEAT					
(BTU/lb./°F)					
HEAT DEFLECTION TEMP.					
(°F)					
At 66 psi		130 - 227		158	144
At 264 psi	160 - 215	113 - 202	265 - 285	145	138
MAX. CONTINUOUS TEMP. (F.°)	140 - 200		250		
ELECTRICAL					
VOLUME RESISTIVITY					
(Ohm/cm)				6 x 10 ¹⁵	>10 ¹⁵
DIELECTRIC STRENGTH					
(V/Mil)					
DIELECTRIC CONSTANT					
At 60 HZ	3.5 - 4.5	4.0 - 5.0	2.97 - 3.17		
At 1 MHZ		4.0 - 5.0		3.2	
DISSIPATION FACTOR					
At 60 HZ		0.01 - 0.02			
At 1 MHZ		0.02 - 0.04		0.02	
ARC RESISTANCE (SECONDS)	No Track		10 - 120	125	

