



TYPICAL PROPERTIES of CAST ACRYLIC		
ASTM or UL test	Property	Acrylic
PHYSICAL		
D792	Density (lb/in ³) (g/cm ³)	0.043 1.18
D570	Water Absorption, 24 hrs (%)	0.3
MECHANICAL		
D638	Tensile Strength (psi)	8,000 - 11,000
D638	Tensile Modulus (psi)	350,000 - 500,000
D638	Tensile Elongation at Break (%)	2
D790	Flexural Strength (psi)	12,000 - 17,000
D790	Flexural Modulus (psi)	350,000 - 500,000
D695	Compressive Strength (psi)	11,000 - 19,000
D695	Compressive Modulus (psi)	-
D785	Hardness, Rockwell	M80 - M100
D256	IZOD Notched Impact (ft-lb/in)	0.3
THERMAL		
D696	Coefficient of Linear Thermal Expansion (x 10 ⁻⁵ in./in./°F)	5 - 9
D648	Heat Deflection Temp (°F / °C) at 264 psi	150-210 / 65-100
D3418	Melting Temp (°F / °C)	- / -
-	Max Operating Temp (°F / °C)	150-200 / 65-93
C177	Thermal Conductivity (BTU-in/ft ² -hr-°F) (x 10 ⁻⁴ cal/cm-sec-°C)	3.9 1.2
UL94	Flammability Rating	-
ELECTRICAL		
D149	Dielectric Strength (V/mil) short time, 1/8" thick	400
D150	Dielectric Constant at 60 Hz	4.0
D150	Dissipation Factor at 60 Hz	0.05
OPTICAL		
-	Light Transmission, minimum (%)	92
-	Refractive Index	1.48-1.50

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets.
All values at 73°F (23°C) unless otherwise noted.

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