



TYPICAL PROPERTIES of ACETALS				
ASTM or UL test	Property	Acetal Copolymer	Delrin [®] Homopolymer	Delrin [®] AF PTFE-filled
PHYSICAL				
D792	Density (lb/in ³) (g/cm ³)	0.051 1.41	0.051 1.41	0.054 1.50
D570	Water Absorption, 24 hrs (%)	0.2	0.2	0.2
MECHANICAL				
D638	Tensile Strength (psi)	9,500	11,000	8,000
D638	Tensile Modulus (psi)	400,000	450,000	435,000
D638	Tensile Elongation at Break (%)	30	30	15
D790	Flexural Strength (psi)	12,000	13,000	12,000
D790	Flexural Modulus (psi)	400,000	450,000	435,000
D695	Compressive Strength (psi)	15,000	16,000	16,000
D695	Compressive Modulus (psi)	400,000	450,000	350,000
D785	Hardness, Rockwell	M88 / R120	M89 / R122	M85 / R115
D256	IZOD Impact Notched (ft-lb/in)	1.0	1.0	0.7
THERMAL				
D696	Coefficient of Linear Thermal Expansion (x 10 ⁻⁵ in./in./°F)	5.40	4.70	5.00
D648	Heat Deflection Temp (°F / °C) at 264 psi	220 / 104	250 / 121	244 / 118
D3418	Melting Point Temp (°F / °C)	335 / 168	347 / 175	347 / 175
-	Max Operating Temp (°F / °C)	180 / 82	180 / 82	180 / 82
C177	Thermal Conductivity (BTU-in/ft ² -hr-°F) (x 10 ⁻⁴ cal/cm-sec-°C)	1.6 5.5	2.5 8.6	-
UL94	Flammability Rating	HB	HB	HB
ELECTRICAL				
D149	Dielectric Strength (V/mil) short time, 1/8" thick	420	450	400
D150	Dielectric Constant at 1 MHz	3.8	3.7	3.1
D150	Dissipation Factor at 1 MHz	0.005	0.005	0.010
D257	Volume Resistivity (ohm-cm) at 50% RH	10 ¹⁵	10 ¹⁵	3.0 x 10 ¹⁶

Data provided is for reference purposes only. Additional testing may be required for design specifications or quality control. All values at 73°F unless otherwise stated.

