



## Optical Grade Acrylic Data Sheet

PROPERTY <sup>a</sup>	TEST METHOD	TYPICAL VALUE <sup>b</sup>
<b>PHYSICAL</b>		
Specific Gravity	ASTM D792	1.19
Hardness (Rockwell)	ASTM D785	M98
Water Absorption (24hr. @ 73F)	ASTM D570	0.2 %
Chemical Resistance	ANSI Z26.1	fair (light crazing)
w/ TSP DURAVUE <sup>®</sup>		pass
Abrasion Resistance (taber, 100 cycles)	ASTM D1044-1003	>10 % haze
w/ TSP DURAVUE <sup>®</sup>		<1.0 % haze
<b>OPTICAL</b>		
Refractive Index	ASTM D542A	1.49
Light Transmission	ASTM D1003	92 %
Haze	ASTM D1003	<0.5 %
<b>MECHANICAL</b>		
Tensile Strength	ASTM D638	11,250 psi
Tensile Elongation	ASTM D638	6.4 %
Tensile Modulus	ASTM D638	450,000 psi
Flexural Strength	ASTM D790	15,250 psi
Flexural Modulus	ASTM D790	475,000 psi
Compression Strength	ASTM D695	18,000 psi
Impact Strength (Notched Izod)	ASTM D256A	0.4 ft.lbs/in
<b>THERMAL</b>		
Coefficient of Thermal Expansion	ASTM D696	4.2 x 10 <sup>-5</sup> in/in - °F
Coefficient of Thermal Conductivity	Cento-Fitch	1.3 BTU/(hr)(sf)(°F/in)
Deflection Temperature (264 psi)	ASTM D648	203 °F
Flammability (>.080")	UL94	HB
<b>ELECTRICAL</b>		
Dielectric Strength	ASTM D149	430 V/mil
Dielectric Constant (60 Hz)	ASTM D150	3.6
Volume Resistivity	ASTM D257	1.0 x 10 <sup>16</sup> ohm-cm

NOTES: a Typical values; should not be used for specification purposes

b Values are for nominal 0.250" (6mm) thickness. Some values will change with thickness or pigmentation