

## Sunlite® / Thermaglas®

Notes: The table depicting the typical properties of SUNLITE sheets appears below.

Conditions, units and values in U.S. Customary units are presented in the table within parentheses. All the results depicted in this table were obtained by following the indicated ASTM method except where another method is indicated by the appearance of this symbol (b).

Material: Multiwall Polycarbonate

Updated:8/16/11 (MDW)

Property	Conditions (U.S. Customary)	ASTM Method	Units - SI (U.S. Customary)	Value (U.S. Customary)
<b>Physical</b>				
Density		D-1505	g/cm <sup>3</sup> (lb/ft <sup>3</sup> )	1.2 (75)
Water Absorption	24 hr. @ 23°C	D-570	%	0.15
<b>Mechanical</b>				
Tensile strength at yield	10 mm/min (0.4 in./min)	D-638	MPa (psi)	62 (9,000)
Tensile strength at break	10 mm/min (0.4 in./min)	D-638	MPa (psi)	65 (9500)
Elongation at yield	10 mm/min (0.4 in./min)	D-638	%	6
Elongation at break	10 mm/min (0.4 in./min)	D-638	%	110
Tensile Modulus of Elasticity	10 mm/min (0.4 in. /min)	D-638	MPa (psi)	2,378 (345,000)
Flexural Modulus	1.3 mm/min (0.05 in./min)	D-790	MPa (psi)	2,378 (345,000)
Flexural Strength at Yield	1.3 mm/min (0.05 in./min)	D-790	MPa (psi)	93 (13,500)
Notch Impact Strength Izod	23°C (73°F)	D-256	J/m (ft-lbf/in.)	800 (15)
Notch Impact Strength Charpy	23°C (73°F)	D-256	J/m (ft-lbf/in)	800 (15)
Impact Falling Weight	3 mm (0.12 in.) Sheet	ISO-6603/1b	J (ft-lbf)	40-400(30-295)
Rockwell Hardness		D-785	R scale / M scale	125 / 70
<b>Thermal</b>				
Long Term Service Temperature			°C (°F)	-75 to +100 (-175 to +212)
Short Term Service Temperature			°C (°F)	-75 to +120 (-175 to +250)
Heat Deflection Temperature	Load: 1.82 Mpa (264 psi)	D-648	°C (°F)	132 (270)
Vicat Softening Temperature	Load: 1 kg (2.2 lb)	D-1525	°C (°F)	149 (300)
Coefficient of Linear Thermal Expansion		D-696	10 <sup>-5</sup> /°C (10 <sup>-5</sup> /°F)	6.5 (3.6)
Thermal Conductivity		C-177	W/m <sup>2</sup> K (Btu-in./hr-ft <sup>2</sup> -°F)	Varies w/ Thickness
<b>Optical</b>				
Haze	3 mm (0.12 in.) Clear Sheet	D-1003	%	Varies w/ Thickness
Light Transmission	3 mm (0.12 in.) Clear Sheet	D-1003	%	Varies w/ Thickness
Refractive Index	Clear Sheet	D-542		1.59
Yellowness Index	3 mm (0.12 in.) Clear Sheet	D-1925		<1