



## PALIGHT® Premium

Material: Rigid Foam PVC  
 Updated: 2/2/12 (MDW)

Notes: The table depicting the typical properties of PALIGHT Premium 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).

Property	Conditions (U.S. Customary)	ASTM Method	Units - SI (U.S. Customary)	Value (U.S. Customary)	
				3mm	10mm
<b>Physical</b>					
Density		D-1505	g/cm <sup>3</sup> (lb/ft <sup>3</sup> )	0.65-0.7 (41-44)	0.55-0.6 (34-37)
Water Absorption	24 hr. @ 23°C	D-570	%	0.5	0.8
<b>Mechanical</b>					
Tensile strength at yield	10 mm/min (0.4 in./min)	D-638	MPa (psi)	16 (2300)	11 (1600)
Elongation at break	10 mm/min (0.4 in./min)	D-638	%	30	20
Flexural Modulus	1.3 mm/min (0.05 in./min)	D-790	MPa (psi)	900 (130,500)	900 (130,500)
Flexural Strength at Yield	1.3 mm/min (0.05 in./min)	D-790	MPa (psi)	28 (4,061)	22 (3,190)
Notch Impact Strength Charpy	23°C (73°F)	D-256	J/m (ft-lbf/in)	29 (0.54)	17 (0.32)
<b>Thermal</b>					
Long Term Service Temperature			°C (°F)	-15 to 55 (14 to 131)	-15 to 55 (14 to 131)
Heat Deflection Temperature	Load: 1.82 Mpa (264 psi)	D-648	°C (°F)	63 (145)	63 (145)
Vicat Softening Temperature	Load: 1 kg (2.2 lb)	D-1525	°C (°F)	75 (167)	75 (167)
Coefficient of Linear Thermal Expansion		D-696	10 <sup>-5</sup> /°C (10 <sup>-5</sup> /°F)	6.7 (3.7)	6.7 (3.7)
Thermal Conductivity		C-177	W/m <sup>2</sup> K (Btu-in./hr-ft <sup>2</sup> )	0.07 (0.49)	0.07 (0.49)
<b>Optical</b>					
Whiteness Index		D-792	WI		103
<b>Electrical</b>					
Surface Resistance	Ketley	D-257	Ohm		5 x 10 <sup>15</sup>
Volume Resistance	Ketley	D-257	Ohm-cm		2 x 10 <sup>16</sup>