PALIGHT® Premium

Material: Rigid Foam PVC

Updated: 3/9/15 (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
Physical					
Density		D-1505	g/cm^3 (lb/ft^3)	0.65-0.7 (41-44)	0.55-0.6 (34-37)
Water Absorption	24 hr. @ 23°C	D-570	%	0.5	0.8
Mechanical					
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)
Thermal					
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^{-5}/°C (10^{-5}/°F)	6.7 (3.7)	6.7 (3.7)
Thermal Conductivity		C-177	W/m°K (Btu-in./hr-ft^2-	0.07 (0.49)	0.07 (0.49)
Optical					
Whiteness Index		D-792	WI	101	
Electrical					
Surface Resistance	Ketley	D-257	Ohm	5 x 10^{15}	
Volume Resistance	Ketley	D-257	Ohm-cm	2 x 10^{16}	