SUNTOP®

Material: Fire Retardant Polycarbonate Sheet

Updated:11/02/2018 MDW

Notes: The table depicting the typical properties of SUNTOP sheets appears below. Note that some of the displayed properties are typical to polycarbonate (the material SUNTOP is made of) while others relate to a typical 2 mm (.080) thick SUNTOP sheet.
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)
Physical				
Density		D-1505	g/cm^3 (lb/ft^3)	.8 (50)
Water Absorption	24 hr. @ 23°C	D-570	%	1.23
Mechanical				
Tensile strength at yield	10 mm/min (0.4 in./min)	D-638	MPa (psi)	25 (3625)
Tensile strength at break	10 mm/min (0.4 in./min)	D-638	MPa (psi)	25 (3625)
Elongation at yield	10 mm/min (0.4 in./min)	D-638	%	3
Tensile Modulus of Elasticity	10 mm/min (0.4 in. /min)	D-638	MPa (psi)	1200 (174,000)
Flexural Modulus	1.3 mm/min (0.05 in./min)	D-790	MPa (psi)	1600 (232,000)
Flexural Strength at Yield	1.3 mm/min (0.05 in./min)	D-790	MPa (psi)	50 (7250)
Thermal				
Long Term Service Temperature			°C (°F)	-50 to +100 (-58 to +212)
Short Term Service Temperature			°C (°F)	-50 to +120 (-58 to +248)
Heat Deflection Temperature	Load: 1.82 Mpa (264 psi)	D-648	°C (°F)	124 (255)
Coefficient of Linear Thermal Expansion		D-696	10^{-5}/°C (10^{-5}/°F)	6.5 (3.6)