

**lucitelux** Myst<sup>®</sup> Technical Bulletin

		Test Method	Typical Value <sup>(a)</sup>	
<b>General</b>	Specific Gravity	ASTM D792	1.19	
<b>Mechanical</b>	Tensile Strength ❖ % Elongation @ break ❖ Modulus of elasticity ❖ % Elongation @ yield	ASTM D638	11,000 psi 7.6% 465,000 psi 6.0%	
	Flexural Strength ❖ Flexural modulus (tangent)	ASTM D790	14,700 psi 461,000 psi	
	Impact Strength ❖ Compressive strength (x-y plane) ❖ Compressive stress @ yield ❖ Compressive modulus ❖ Charpy (un-notched) ❖ Charpy (notched) ❖ Shear Strength (punch tool)	ASTM D695  ASTM D256 ASTM D6110 ASTM D732	83,300 psi 18,000 psi 279,000 psi 5.0 ft. lb./in/in 20.8 J/m 11,200 psi	
	Rockwell Hardness	ASTM D785	M-100	
	Residual Shrinkage (b) (Internal Strength)	ASTM D702	2.5 % maximum	
	<b>Optical</b>	Refractive Index	ASTM D542	1.49
	Haze	ASTM D1003	95%	
Yellowness index (YI)		0.5		
Surface Abrasion Resistance (c) (Taber , CS-10)	ASTM D1044	500 cycles : < 1% 1000 cycles: <2%		
<b>Thermal</b>	Maximum Continuous Service Temperature		175°F (d)	
	Coefficient of Thermal Conductivity		1.45 Btu in./ft <sup>2</sup> hr. °F	
	Deflection Temperature under load, 264 psi	ASTM D648	200°F	
	Hot Forming Temperature		280°-340°F (138°-170°C)	
	Coefficient of Linear Thermal Expansion	ASTM D696	3.5 E-05 in/in/°F	
	Specific Heat		0.35 Btu/ lb. (°F)	
<b>Electrical</b>	D-C Resistance ❖ Volume Resistivity ❖ Surface Resistivity	ASTM D257	>3.912E+15 Ω/cm > 5.237E+15 Ω/sq.	
	Dielectric Strength (2000v/sec)	ASTM D149	354 V/mil	
			*Continued on Next Page*	

	Dielectric Constant, k' ❖ 60 Hz ❖ 1 KHz ❖ 1MHz Dissipation Factor, D ❖ 60Hz ❖ 1KHz ❖ 1MHz Arc Resistance	ASTM D150    ASTM D495	3.3 3.0 2.7  0.06 0.04 0.02 No tracking
<b>Combustibility</b>	Smoke Density Rating Tunnel Test (smoke developed) ❖ 0.118" ❖ 0.236"	ASTM D2843  ASTM E84	13.5%  385 530
	Rate of Flame Spread ❖ 0.118" ❖ 0.236"	ASTM E84	140 110
	Fuel contribution factor Ignition temperature	- ASTM D1929	11,300 Btu/lb. 750°F (399°C)
	Radiant Panel, Flame spread index ❖ 0.118" ❖ 0.236"	ASTM E162	219 249
	Horizontal Burn ❖ 0.118" ❖ 0.236"	ASTM D635	1.18 in./min. 0.65 in./min
	UL Horizontal Burn Rating	UL94	94 HB (f1); (f2)
<b>Miscellaneous</b>			
Water Absorption	24 hrs. @ 23°C 2 hrs. boiling water immersion	ASTM D570	0.2% 0.6%
	Soluble Matter Lost (post immersion)	ASTM D570	Nil
	Odor	-	Nil
Specifications	Code compliance	ASTN D4802 ANSI Z-26.1	Category A-2, finish 1 Standards 205 & 302

**Notes:**

- a) Values provided should not be used for specification purposes. Some values will vary with sheet thickness.
- b) Measured at room temperature before and after heating above 300° F.
- c) Numerical values indicate % light transmission loss after indicated cycles.
- d) It is recommended that temperatures not exceed 180°F for continuous service

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