

lucitelux[®] Myst[®] Technical Bulletin

		Test Method	Typical Value ^(a)	
General	Specific Gravity	ASTM D792	1.19	
Mechanical	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	
	Optical	Refractive Index	ASTM D542	1.49
	Light Transmission, Total	ASTM D1003	> 95%	
Haze	ASTM D1003	95%		
Yellowness index (YI)		0.5		
Surface Abrasion Resistance (c) (Taber , CS-10)	ASTM D1044	500 cycles : < 1% 1000 cycles: <2%		
Thermal	Maximum Continuous Service Temperature		175°F (d)	
Coefficient of Thermal Conductivity		1.45 Btu in./ft ² 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)		
Electrical	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	

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	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
Combustibility	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)
Miscellaneous			
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	LP 391 D ASTM D4802 ANSI Z-26.1	Item A, Type 1, Grade C 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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