

OPTIX® L MUSEUM GRADE

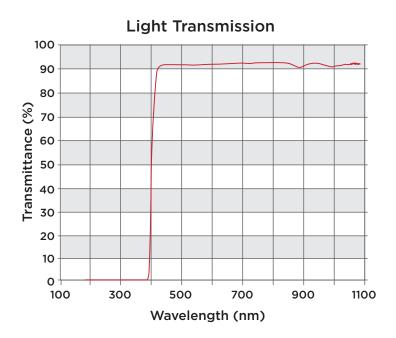
OPTIX L Museum Grade continuous cast acrylic sheet provides maximum protection and filters out 98% of damaging UV light. This acrylic sheet meets the demanding museum standards for display cases, with 100% guarantee of no black specks, and superior optical clarity. With uniform thickness OPTIX L Museum Grade is lighter weight and many times more resistant than glass. It is easy to fabricate and fit to all display case requirements and it can be used either for interior or exterior applications. OPTIX L Museum Grade is easy to clean and offers superior craze and chemical resistance. It is available in 0.098" - 0.236" and is available in a wide range of sheet sizes.

APPLICATIONS

Exhibit Display Cases

TYPICAL PROPERTIES*			
Property	Test Method	Units	Values
PHYSICAL			
Specific Gravity	ASTM D792	-	1.19
Water Absorption	ASTM D570		
24 hrs @ 23°C		%	0.2
2 hrs boiling water immersion		%	0.6
MECHANICAL			
Tensile Strength	ASTM D638	psi	11,000
% Elongation @ Break		%	7.6
Modulus of Elasticity		psi	465,000
% Elongation @ Yield		%	6.0
Flexural Strength	ASTM D790	psi	14,700
Flexural Modulus	ASTM D/90	psi	461,000
Impact Strength			
Compressive Strength (x-y plane)	ASTM D695	psi	83,300
Compressive Stress @ Yield		psi	18,000
Compressive Modulus		psi	279,000
Charpy (un-notched)	ASTM D256	ft-lb/in/in	5.0
Charpy (notched)	ASTM D6110	J/m	20.8
Shear Strength (punch tool)	ASTM D732	psi	11,200
Izod (procedure A)	ASTM D256	ft-lb/in	0.32
Rockwell Hardness	ASTM D785		M-100
Residual Shrinkage (Internal Strength)	ASTM D702	%	2.5 maximum
OPTICAL			
Refractive Index	ASTM D542	_	1.49
Haze	ASTM D1003	%	< 1
Light Transmission	ASTM D1003	%	92
Yellowness lindex (YI)	,	-	< 0.3
THERMAL			
Maximum Continuous Service Temperature	_	°E	175 (d)
Coefficient of Thermal Conductivity	_	Btu-in/ft²/ hr/°F	1,45
Deflection Temperature Under Load, 264 psi	- ASTM D648	%F	200
Coefficient of Linear Thermal Expansion	ASTM D696	in/in/°F	3.5 E-05
Specific Heat	A3111 D090	Btu/lb/°F	0.35
Smoke Density Rating	- ASTM D2843	% %	13.5
Smoke Developed Index	ASTM D2843 ASTM E84	76	750
'	ASTM E84 ASTM F84	-	750 95
Flame Spread Index	AS1M E84	- D+/II _n	
Specific Energy	- ASTM D1929	Btu/lb °F	11,300 750
Self Ignition Temperature		·F	
Radiant Panel, Flame Spread index Horizontal Burn	ASTM E162 ASTM D635	in /nain	155
		in./min.	0.71
UL Horizontal Burn Rating	UL94	-	HB
ELECTRICAL			
Volume Resistivity	ASTM D257	Ohm/cm	>3.912E+15
Surface Resistivity	ASTM D257	Ohm/sq	> 5.237E+15
Dielectric Strength (2000v/sec)	ASTM D149	V/mil	354
Dielectric Constant, k			
60 Hz		Hz	3.3
1 KHz	ASTM D150	Hz	3.0
1 MHz		Hz	2.7
Dissipation Factor, D			
60 Hz		Hz	0.06
4.00		Hz	0.04
1 KHz			
1 KHz 1 MHz		Hz	0.02

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These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. We recommend that the prospective user determines the suitability of our materials and suggestions before adopting them on a commercial scale.



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