

OPTIX-L Frame Grade Sheet

Typical Properties

Physical	TEST METHOD	UNITS	OPTIX-L
Specific Gravity/Relative Density	ASTM D792		1.19
Optical Refractive Index	ASTM D542		1.49
Light Transmission - Total	ASTM D1003	%	92%
Light Transmission - Haze	ASTM D1003	%	Less Than 1%
Water Absorption	ASTM D570	%	0.2

Mechanical	TEST METHOD	UNITS	OPTIX-L
Tensile Strength	ASTM D638	psi	11,000
Tensile Modulus of Elasticity	ASTM D638	psi	465,000
Flexural Strength	ASTM D790	psi	14,700
Flexural Modulus of Elasticity	ASTM D790	psi	461,000
Dielectric Constant @1kHz	ASTM D150		3
Dielectric Constant @1mHz	ASTM D150		2.7
Dielectric Strength	ASTM D149	volts/mil	354
Volume Resistivity	ASTM D257	ohms/cm	>3.912E+15 Ω/cm
Compressive Strength	ASTM D695	psi	83,300
Shear Strength	ASTM D732	psi	11,200
Rockwell Hardness	ASTM D785		M-100

Thermal	TEST METHOD	UNITS	OPTIX-L
Maximum Recommended Continuous Service Temperature		°F	175
Forming Temperature		°F	280° - 340°F (138° - 170°C)
Deflection Temperature @ 264 psi (1.8 MPa)	ASTM D648	°F	200
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.5x10 ⁻⁵
Thermal Conductivity	ASTM C177	BTU-ft/ft ² /hr/°F	1.45 Btu in/ft ² hr. °F
Smoke Density Rating	ASTM D2843	%	13.5
Self-Ignition Temperature	ASTM D1929	°F	750°F
Flame Spread Index	ASTM E84		140

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 determine the suitability of our materials and suggestions before adopting them on a commercial scale.

Questions? Please contact Plaskolite Customer Support 800-848-9124