

## Optix®-L Clear Acrylic

Craze Resistant Designer Cast Acrylic

### Description and Overview

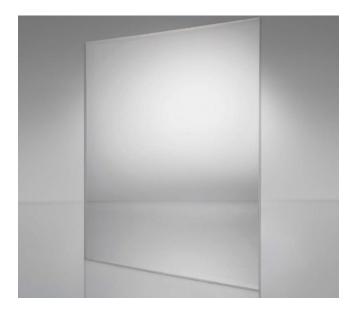
Optix®-L continuous cast acrylic sheets are an excellent choice for protective framing solutions while maintaining an elegant and aesthetically pleasing look. Formerly known as Lucitelux, Optix®-L is a lightweight and easily machined alternative to glass when it comes to applications such as safety glazing, picture framing, jewelry, and lighting shields.

Optix® sheets are 2 to 10 times stronger than double strength glass while only weighing half as much and are shatter-resistant. Superior craze resistance and UV stability in addition to reduced heat buildup from sunlight make them an ideal fit for projects and products that require UV resistance, such as safety glazing for outdoor signs and lighting fixtures.

#### Applications and Uses

Optix® acrylic sheets are easy to fabricate thanks to their high molecular weight. They are easy to shape, form, cut, and bond, and can be used for a variety of applications. While their applications for decorative or aesthetic enhancements are many, Optix®-L can also be used for safety glazing for buildings, vehicles, instrument and equipment colors, and machinery guards.

- Picture framing
- Safety glazing
- Indoor and outdoor signage
- Exterior panels for appliances
- Vehicle trims
- Jewelry
- Furniture
- Household/business accessories
- Lighting shield



### Properties and Specifications

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

Properties are typical.

Chem is an abbreviation for chemically affixed with glues, chemicals, or adhesive.

Mech is an abbreviation for mechanically affixed bonding.

Field testing is recommended for any application.

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# **Typical Properties**

Property	Test Method	Units	OPTIX-L
MECHANICAL			
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 +15Ω/cm
Compressive Strength	ASTM D695	psi	83,300
Shear Strength	ASTM D732	psi	11,200
Rockwell Hardness	ASTM D785	psi	M-100

