

# Lexan\* 9034 Sheet

## Product Datasheet

### Description

Lexan\* 9034 uncoated polycarbonate sheet is the standard grade of Lexan sheet for transparent protective glazing. High-impact Lexan 9034 sheet may be an excellent candidate for primary glazing, or on either side of existing glazing for economical protection against breakage or intrusion. A better insulator than glass, Lexan 9034 sheet may contribute to lower energy costs.

### Typical Property Values ♦

Property	Test method	Unit	Value
<b>Physical</b>			
Specific Gravity	ASTM D792	—	1.20
Refractive Index @ 77°F	ASTM D542A	—	1.586
Light Transmission (Average), 1/8" disk	ASTM D1003	%	88
Rockwell Hardness	ASTM D785	—	M70
Abrasion Resistance, Taber Abrader, CS-17 wheel	ASTM D1044	mg/1,000 cycles	10
Water Absorption, Equilibrium, 24 hrs	ASTM D570	%	0.15
@ 73°F			0.35
@ 212°F			0.58
<b>Mechanical</b>			
Tensile Strength @ Yield	ASTM D638	psi	9,000
@Ultimate			9,500
Tensile Modulus	ASTM D638	psi	345,000
Flexural Strength	ASTM D790	psi	13,500
Flexural Modulus	ASTM D790	psi	345,000
Flexural Endurance @ 1,800 cycles/min, 73°F, 50% RH	ASTM D671	psi	1,000
Compressive Strength	ASTM D695	psi	12,500
Compressive Modulus	ASTM D695	psi	345,000
Elongation	ASTM D638	%	110
Poisson's Ratio	—	—	0.37
Izod Impact Strength Notched @ 1/8"	ASTM D256A	ft-lbs/in	12-16
Unnotched @ 1/8"			60 (no failure)
Tensile Impact Strength, S-Type Specimen	ASTM 1822	ft-lbs/in <sup>2</sup>	225-300
Shear Strength @ Yield	ASTM D732	psi	6,000
@ Ultimate			10,000
Shear Modulus	ASTM D732	psi	114,000
Deformation Under Load @ 4,000 psi	ASTM D621	%	
@ 73°F			0.2
@ 158°F			0.3

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♦ These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local GE - Plastics representative or the GE-Plastics Quality Services Department.



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### Typical Property Values (continued)◆

Property	Test Method	Unit	Value
<b>Thermal</b>			
Coefficient of Thermal Expansion		ASTM D696	in/in/°F 3.75 x 10 <sup>-5</sup>
Coefficient of Thermal Conductivity		ASTM C177	Btu•in/hr•ft <sup>2</sup> •°F 1.35
Specific Heat @ 40°C			cal/gm/°C 0.30
Heat Deflection Temperature		ASTM D648	°F
@ 264 psi			270
@ 66 psi			280
Brittle Temperature		ASTM D746	°F -211
<b>Flammability</b>			
Horizontal Burn (Flame Spread) AEB		ASTM D635	in <1
<b>Electrical</b>			
Dielectric Constant		ASTM D150	—
@ 10 Hz			2.96
@ 60 Hz			3.17
Volume Resistivity		ASTM D257	ohm-cm 8.2 x 10 <sup>16</sup>
Power Factor		ASTM D150	
@ 60 Hz			0.0009
@ 1,000,000 Hz			0.010
Arc Resistance		ASTM D495	sec 10-11
Stainless Steel Strip Electrodes			120
Tungsten Electrodes			120

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