POLYVANTIS

PRODUCT DATASHEET

LEXAN™ SGC308

DESCRIPTION

Matte-finish LEXAN™ SGC308 sheet for signs combines the impact strength of LEXAN polycarbonate sheet with a proprietary, UV-resistant surface treatment that protects it from weathering. LEXAN SG308 sheet is backed by a five-year limited warranty against yellowing, loss of light transmission and breakage#. LEXAN SGC308 sheet has a matte surface on one side and a polished surface on the other. It is ideally suited for all types of thermoformed or flat signs where reduced reflection and glare are required.

TYPICAL PROPERTY VALUES*

PROPERTY	TEST METHOD	UNITS	VALUE
Physical			
Specific gravity	ASTM D792	-	1.20
Light Transmission @.125" (Average)	ASTM D1003	%	82
Refractive Index @ 77°F	ASTM D542A	-	1.586
Rockwell Hardness	ASTM D785	-	M70,R118
Mechanical			
Tensile Strength @ Yield	ASTM D638	psi	9,000
@ Ultimate			9,000
Tensile Modulus	ASTM D638	psi	280,000
Flexural Strength	ASTM D790	psi	12,500
Flexural Modulus	ASTM D790	Psi	333,000
Elongation	ASTM D638	%	70
Poisson's Ratio	-	-	0.37
Compression Strength	ASTM D695	Psi	12,500
Izod Impact Strength, up to 125 mils	ASTM D256A	ft-lbs/in	
Notched			12-16
Drop Ball Impact Strength, 1/8" dia.dart @ .236	POLYVANTIS Test ##	ft-lbs	
@ 73°F			>200
@ 32°F			>200
@ 0°F			>200
Thermal			
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.75×10^{-5}
Specific Heat @ 40° C		cal/gm/°C	0.30
Heat Deflection Temperature	ASTM D648	°F	
@ 264 psi			260

PROPERTY	TEST METHOD	UNITS	VALUE
Electrical			
Dielectric Strength, Short Time @ 125 mils	ASTM D149	V/mil	380
Dielectric Constant, 23°C @ 60 Hz	ASTM D150	-	2.9
@ 1,000 Hz			2.9
@ 1,000,000 Hz			2.9
Dissipation Factor @ 60 Hz	ASTM D150		0.009
@ 1,000 Hz			0.01
Volume Resistivity @ 23°C	ASTM D257		8×10^{-16}

♦ These typical values are not intended for specification purposes. If minimum certifiable properties are required please contact your local POLYVANTIS Innovative Plastics, Specialty Film & Sheet representative.

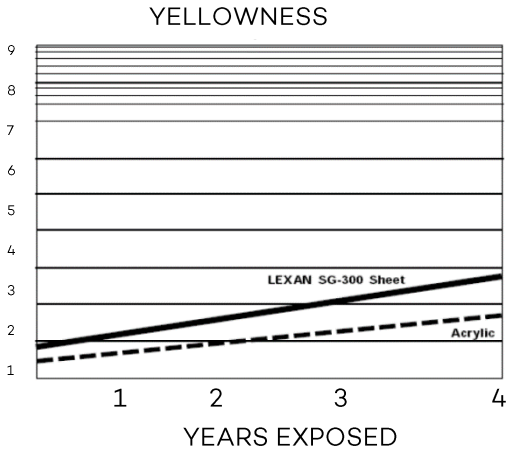
See actual Product Warranty for conditions that may apply.

5-lb steel ball dropped from a height of 40 feet.

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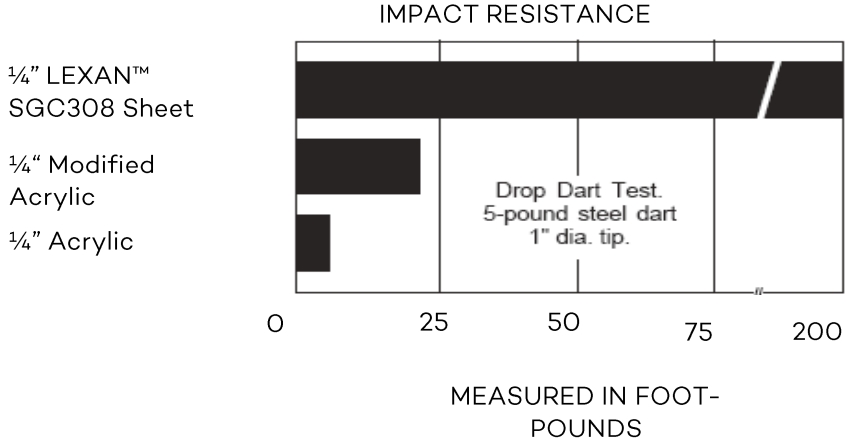
UV RESISTANCE

LEXAN™ SGC308 sheet was compared to acrylic in Florida weathering tests. After five years, LEXAN SG 308 sheet showed only minimal changes in light transmission and clarity.



IMPACT RESISTANCE

LEXAN™ SGC308 sheet has up to 30 times the impact strength of “Acrylic” and 10 times the impact strength of “Modified Acrylic".



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LEXAN™ POLYCARBONATE FILM & SHEET Tough, Virtually Unbreakable

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