

# LEXAN™ SGC510D SHEET

## PRODUCT DATASHEET

### DESCRIPTION

LEXAN™ SGC510D Solar Grade Coextruded sheet for signs combines the impact strength of LEXAN polycarbonate sheet with a proprietary UV-resistant cap layer that provides long-term protection against weathering. LEXAN SGC5xxx sheet is backed by ten-year limited written warranty against yellowing, loss of light transmission and breakage. Providing long-lasting clarity over a wide range of environments, LEXAN SGC510D sheet offers extended service life and reduced life-cycle material costs. It is an excellent candidate for all types of thermoformed or flat signs, whether screen-printed, painted or decorated with vinyl graphics.

### TYPICAL PROPERTY VALUES ◆

PROPERTY	TEST METHOD	UNITS	VALUE
<b>Physical</b>			
Specific gravity	ASTM D792	-	1.20
Rockwell Hardness	ASTM D785	-	M70,R118
<b>Mechanical</b>			
Tensile Strength	ASTM D638	psi	
Ultimate			9,500
Tensile Modulus	ASTM D638	psi	285,000
Flexural Strength	ASTM D790	psi	13,500
Flexural Modulus	ASTM D790	psi	340,000
Compressive 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" dia.dart @ .236 thickness	SABIC Test ##	ft-lbs	
@ 73°F			>200
@ 0°F			>200
<b>Thermal</b>			
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	$3.75 \times 10^{-5}$
Heat Deflection Temperature	ASTM D648	°F	
@ 264 psi			260
@ 66 psi			280

- ◆ These typical values are not intended for specification purposes. If minimum certifiable properties are required please contact your local SABIC Innovative Plastics, Specialty Film & Sheet representative.
- # See actual Product Warranty for conditions that may apply.
- ## Measured by dropping a 25-pound dart (1" dia. tip) from a height of 8 feet.
- ™ LEXAN is a trademark of SABIC.

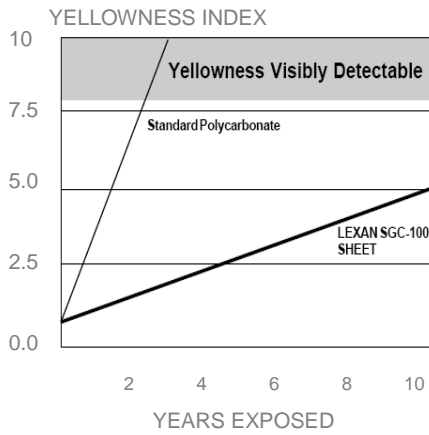
## LIGHT TRANSMISSION

GAUGE (MM)	TEST METHOD	LT (%)	DEVIATION
2.4	ASTM D1003	47	± 3
3.0	ASTM D1003	40	± 3
3.8	ASTM D1003	30	± 3
4.5	ASTM D1003	26	± 3
6.0	ASTM D1003	20	± 3

## UL FILE NUMBER: E121562

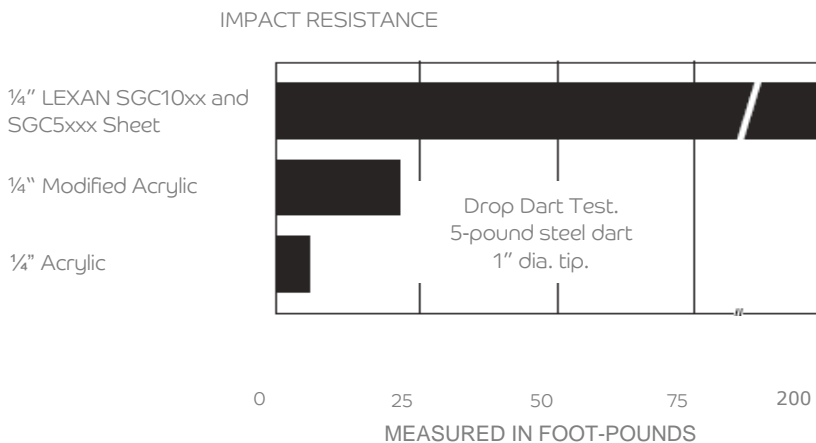
## UV RESISTANCE

LEXAN™ SGC10xx sheet was exposed to accelerated QUV weathering. After exposure comparable to 10 years in South Florida, LEXAN SGC10xx and SGC5xxx sheet showed only minimal in yellowness, light transmission and clarity.



## IMPACT RESISTANCE

LEXAN SGC10xx and SG5xxx sheet has up to 30 times the impact strength of "Acrylic" and 10 times the impact strength of "Modified Acrylic".



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