

## Description

One Side Flow Coated Mar/UV-resistant Lexan MR101 sheet combines the impact strength of Lexan polycarbonate sheet with a proprietary abrasion/UV resistant surface that approaches glass in performance. Lexan MR101 Sheet with Margard\* coating is the only polycarbonate material backed by a ten-year limited warranty against yellowing, abrasion resistance, breakage, loss of light transmission, and coating failure.‡)

Lexan MR101 One Side Hard Coated Sheet is a great candidate for all Lamination Applications. Our unique coating is graffiti-resistant enabling restoration to a like-new condition. In addition, Lexan MR101 sheet offers improved resistance to weathering as well as forced-entry protection. It is well-suited for use in stores, public buildings, schools, bus shelters and other high traffic areas. Lexan MR101 sheet is for transparent applications only. Because of its high mar-resistant surface, paint, adhesives and other materials will not adhere to its surface. Due to its mar-resistant coating, Lexan MR101 sheet cannot be cold-formed. For Transportation Applications please order MR101T with ripple orientation.

## Typical Property Values ◆

Property	Test Method	Unit	Value
<b>Physical</b>			
Specific Gravity	ASTM D792	-	1.20
Light Transmission (Average), 1/8" Thick	ASTM D1003	%	88
Chemical Resistance	ANSI Z26.1	-	Passes#
<b>Mechanical</b>			
Tensile Strength, Ultimate	ASTM D638	psi	9,500
Flexural Strength	ASTM D790	psi	13,500
Flexural Endurance @ 1,800 Cycles/Min, 73°F, 50% RH	ASTM D671	psi	1,000
Compressive Strength	ASTM D696	psi	12,500
Modulus of Elasticity	ASTM D638	psi	340,000
Drop Ball Impact Strength†	SABIC Test	ft-lbs	
@ 73°F			>200
@ 32°F			>200
@ 0°F			>200
<b>Thermal</b>			
Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.75 x 10 <sup>-5</sup>
Heat Deflection Temperature @ 264 psi	ASTM D648	°F	260
<b>Flammability</b>			
Horizontal Burn (Flame Spread) AEB	ASTM D635	in	<1
Ignition Temperature Flash Self	ASTM D1929	°F	873 1,076

◆ These typical values are not intended for specification purposes. If minimum certifiable properties are required please contact your local SABIC Innovative Plastics' representative.

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

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‡ Request details of limited ten-year warranty plus cleaning and maintenance instructions.

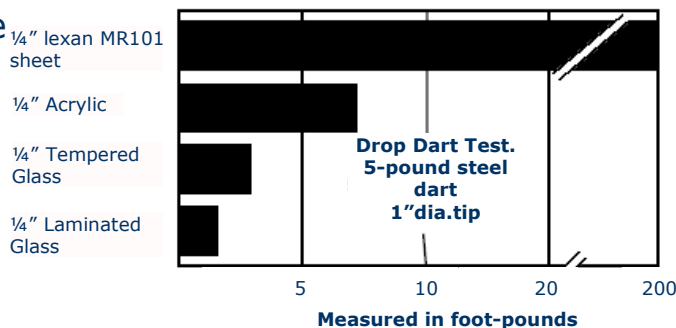
## Abrasion Resistance Comparison

Lexan MR101 sheet exhibits significantly less hazing than uncoated polycarbonate sheet as shown in the abrasion resistance chart.

	Test Method	% Haze		
		Uncoated Polycarbonate	Lexan MR101 Sheet	Glass
Taber Abrasion 100 Cycles CS 10F	ASTM D 1044 Z26.1	35.0	1-3	0.5

\* The Taber Abrader test measures the percent of change in haze that results from the grinding action of two abrasive impregnated wheels on the test samples. A constant load of 500 grams is maintained as the samples rotate on a turntable for a predetermined number of revolutions.

## Impact Resistance



## Code Compliance

Lexan MR101 sheet meets the requirements of all major model building codes

- Model Building Code Organizations The Approved Light Transmitting Plastics requirements set by the three major Model Building Code organizations (BOCA, ICBO, and SBCCI) and Dade County. Lexan MR101 sheet meets the highest rating—Class CC1 Approved Plastic.
- Underwriters Laboratories Lexan MR101 sheet is listed as a Burglary-Resisting Glazing Material according to UL Standard 972.
- CPSC: 16 CFR 1201, I, II Lexan MR101 sheet complies with the Consumer Product Safety Commission's Safety Standard for architectural glazing materials for both Category I and Category II applications.



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