

## Description

Lexan MRT sheet is a transparent, high impact Lexan polycarbonate sheet with a proprietary abrasion-resistant surface. Lexan MRT sheet meets the performance requirements of ANSI Z26.1, required by the Department of Transportation per FMVSS 205, and UMTA guidelines for flammability for windows and lighting lenses.

## 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 D695	psi	12,500
Modulus of Elasticity	ASTM D638	psi	340,000
Drop Ball Impact Strength‡ @ 73°F	SABIC Test	ft-lbs	>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	ASTM D1929	°F	873
Self			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.

# Gasoline and kerosene - no tackiness, crazing or loss of transparency for a minimum of 48 hours.

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

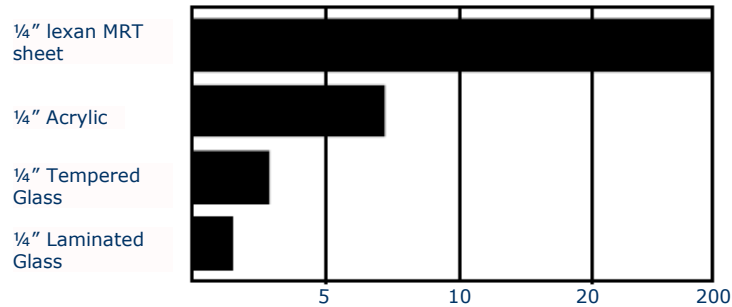
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## Abrasion Resistance Comparison<sup>‡</sup>

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

<sup>‡</sup> 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<sup>¶</sup>



<sup>¶</sup> ) Drop Dart Test with a 5-lb steel dart and a 1" diameter tip.

Measured in foot -pounds



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