

## Description

Lexan\* Exell\* D STP sheet is a textured polycarbonate sheet with UV protection on both sides, offering excellent light diffusion without transparency. It has an excellent impact resistance, an excellent fire performance, ease of handling and installation and is an excellent candidate for wide variety of exterior and interior applications such as balcony and staircase glazing.

## Typical Property Values ♦

Property	Test Method	Unit	Value
<b>Physical</b>			
Density	ISO 1183	g/cm <sup>3</sup>	1.20
Water absorption, 23 °C , 24 hours equilibrium	ISO 62	%	0.10
	ISO 62	%	0.35
<b>Mechanical</b>			
Tensile stress at yield 50 mm/min	ISO 527	MPa	60
Tensile stress at break 50 mm/min	ISO 527	MPa	70
Tensile strain at yield 50 mm/min	ISO 527	%	6
Tensile strain at break 50 mm/min	ISO 527	%	120
Tensile modulus 1 mm/min	ISO 527	MPa	2300
Flexural stress at yield 2 mm/min	ISO 178	MPa	90
Flexural modulus 2 mm/min	ISO 178	MPa	2300
<b>Impact</b>			
Izod impact, notched 23°C	ISO 180/4A	kJ/m <sup>2</sup>	65
Gardner Impact, 20 °C -40 °C	SABIC Method	J	>37
		J	>37
<b>Thermal</b>			
Vicat Softening Temperature, rate B/120	ISO 306	°C	148
Ball pressure test 75 °C 125 °C	IEC 335-1	-	Passes
		-	Passes
Thermal Expansion	DIN 53752	1/ °C	7.10 <sup>-5</sup>
<b>Optical</b>			
Light Transmission %) 3mm	ASTM D1003	%	82

♦ These property values have been derived from Lexan\*resin data for the material used to produce this sheet product. Variation within normal tolerances are possible for various colors. 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. All values are measured at least after 48 hours storage at 23°C/50% relative humidity. All properties are measured on injection molded samples. All samples are prepared according ISO 294.

%) Light transmission value may vary by + or - 5%.

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## Chemical Resistance

Lexan Exell D STP sheet has sufficient resistance to most chemical substances encountered in normal exterior use. In applications where the product will come into contact with aggressive chemicals, specific (application related) testing of the material is always advised. It is essential to check the compatibility before use.

## Product Availability

Lexan Exell D sheet is normally manufactured in the standard sizes listed below. Deliveries from stock or cut to size can be ordered via our customer service organisation.

Standard gauge in mm:	2 - 6
Standard width:	1250 and 2050 mm
Colors:	Clear 112, bronze 5109
Masking:	Adhesive opal PE film on one side



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