

Description

SABIC Innovative Plastics range of Lexan sheet sign grades SG305 and SG305SLG offers significant advantages over many other sign materials in terms of design freedom, fire performance and weathering properties. It also combines high impact resistance with optical clarity that provides excellent protection against vandalism, ensuring a positive corporate image. Lexan SG sheet for Signs are available in clear and opal white sheet with a matte finish on the outside surface for reduced reflection and glare. Lexan SG305 and SG305SLG sheets have proprietary UV protected surfaces giving excellent durability to outdoor weathering.

Typical Property Values ♦

Property	Test Method	Unit	Value
Physical			
Density	ISO 1183	g/cm ³	1.20
Water absorption, equilibrium	DIN 53495	%	0.35
Mechanical			
Tensile stress, yield [#]	ISO 527	MPa	60
Tensile modulus [#]	ISO 527	MPa	2200
Elongation, yield [#]	ISO 527	%	6
Elongation, break [#]	ISO 527	%	110
Flexural strength, yield [#]	ISO 178	MPa	95
Flexural modulus [#]	ISO 178	MPa	2300
Thermal			
Vicat Softening Temperature, B/120 [#]	ISO 306	°C	145
Thermal Expansion [#]	ASTM D696	1/°C	7x10 ⁻⁵
HDT, 0.45 MPa [#]	ISO 75/Be	°C	138

Light Transmission

[#])Optical Properties of Lexan SG305 and SG305SLG sheet. Light Transmission and haze in accordance ASTM D-1003. Equipment: Gardner-dual.

Gloss level in accordance DIN67530 or ISO2813 or ASTM D523

Equipment: Dr. de Lange Reflectometer, type RB

[#]) see warranty for details.

Property	Test	SG305	SG305SLG
Light transmission	ASTM D1003 %	88.1	87.4
Haze	ASTM D1003 %	5.6	44.8
20 degrees Gloss	ASTM D253 polished side	100.9	98.0
	matt side	69.2	31.6

Gloss measurement was done with sample put on a black cloth

Gloss reading was done after 5 seconds

Note: Typical values only

Light transmission values may vary by +/- 5%

Lexan SG sheet is essentially opaque to all wave lengths below 385 nanometers. This useful shielding property prevent discoloration of posters placed behind the Lexan sheet, second surface graphics and lacquers applied to the reverse side.

Impact strength

Using Lexan SG305 and SG305SLG, signs can be installed in areas of high vandalism. Even at sub zero temperatures or high summer temperatures Lexan sheet maintains its high impact resistance, without shattering or breaking.

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Fire Performance

Lexan SG sheet has good fire behavior characteristics. Lexan sheet does not contribute significantly to the spread of fire or to the generation of toxic gases. For details please contact your local sales office.

UV Protection

With a proprietary UV resistant surface treatment on both sides Lexan SG sheets with stand prolonged exposure to harsh sunlight. The superior UV protected surface treatment is not affected by forming and fabricating, and Lexan SG sheets are therefore backed by a 10 years warranty[†]) against yellowing, loss of light transmission and breakage.

[†]) see warranty for details

Chemical Resistance

Taking into account the complexity of chemical compatibility, all chemicals which come into contact with Lexan sheet should be tested. For sign products the most common materials are adhesives, paints, inks, vinyl films and cleaning. Consult our Technical Service Centre in the case of doubt about the chemical compatibility of a product which is not mentioned in one of the tables.

Product Availability

Both Lexan SG sheets are available on economical spools as well as sheet, making it easy to cut non standard sizes.

Sheet Availability

Gauges: 2, 3, 4, 5, 6 **Size (mm)** 2050 x 3050 **Standard colors** Clear 112, Opal white 82943, other colors are upon request.

Spool Availability

Gauge (mm)	Width (mm) (full web (mm))	Length (m)	Weight (kg)
2	1250	250	750
3	(1300)	167	750
2	2050	152	748
3	(2150)	100	738



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