LEXAN™ SG305 SHEET FOR SIGNS

PRODUCT DATASHEET

DESCRIPTION

SABIC range of LEXAN sheet sign grades SG305 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 is available in clear, bronze, opal white (other colors on request) and has a matte finish on the outside surface for reduced reflection and glare. LEXAN SG305 sheet have proprietary UV protected surfaces giving excellent durability to outdoor weathering.

TYPICAL PROPERTY VALUES◆

PROPERTY	TEST METHOD	UNITS	VALUE
PHYSICAL			
Density	ISO 1183	g/cm³	1.20
Water absorption, 50% RH, 23 °C	ISO 62	%	0.15
Water absorption, saturation, 23°C	ISO 62	%	0.35
MECHANICAL			
Yield stress 50 mm/min	ISO 527	MPa	>60
Yield strain 50 mm/min	ISO 527	%	6
Nominal strain at break 50 mm/min	ISO 527	%	>100
Tensile modulus 1 mm/min	ISO 527	MPa	2300
Flexural strength 2 mm/min	ISO 178	MPa	90
Flexural modulus 2 mm/min	ISO 178	MPa	2300
IMPACT			
Charpy impact, notched 23°C, 3.0 mm	ISO 179/1eA	kJ/m²	75
Izod impact, unnotched 23°C, 3.0 mm	ISO 180/1U	kJ/m²	NB
Izod impact, notched 23°C, 3.0 mm	ISO 180/1A	kJ/m²	70
THERMAL			
Vicat softening temperature, rate B/120	ISO 306	°C	145
Temperature of deflection under load (type A), 1.8 MPa, flat	ISO 75-2	°C	127
Thermal conductivity	ISO 8302	W/m.°C	0.2
Coefficient of linear thermal expansion, 23-55°C	ISO 11359-2	1/°C	$7x\ 10^{-5}$
Ball pressure test 125 ±2°C	IEC 60695-10-2	-	Pass
ELECTRICAL			
Volume resistivity	IEC 60093	Ohm.cm	$>10^{15}$
Dielectric strength, in oil, 3.2 mm	IEC 60243-1	kV/mm	18
FIRE RATINGS			
Building & Construction			
Europe	EN13501-1	-	b, s2,d0 (2-6mm)

◆ These property values have been derived from LEXAN™ resin data for the material used to produce this sheet product.
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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

LEXAN SG sheet is available on economical spools as well as sheet, making it easy to cut non standard sizes.

SHEET AVAILABILITY

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

SPOOL AVAILABILITY

Gauge:
2+3 mm
Only available in full web size 2120 mm
Production: Italy

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