EU MIRROR PC-XT-MIRROR

DESCRIPTION

EUMirror PC mirrors are created from Sabic Lexan 9030 sheets. The Lexan 9030 combines high impact and temperature resistance with optical clarity and great planarity of the surfaces. The last 2 characteristics have huge impact on the quality of the mirrors and you will notice a clear reflection without deformations.

EUMirror PC mirrors, like Lexan PC sheets, can be cut, sawn, drilled and milled by using standard workshop equipment. EUMirror PC mirrors, like Lexan PC sheets, can be easily thermoformed, being aware that, when stretched, the mirror progressively loses its reflection capability, turning of a opaque whitish color. The front side of the EUMirror PC mirrors sheets may be decorated using a wide variety of modern techniques such as painting and screen printing. Like for any mirror, UV printing can create problems because of the possible reflection of the UV light directly on the printed heads.

The processes done by EUMirror to transform the Lexan sheets are not impacting in any of the physical, mechanical, characteristics of the Lexan 9030 sheets, for this reason the following typical properties are equal to the ones of the Lexan 9030 PC sheets.

TECHNICAL INFORMATION – TYPICAL PROPERTY VALUES*

GENERAL			
Property	Method	Units	
Density	ISO 1183	g/cm^3	1.20
Water absorption, 50% RH, 23°C	ISO 62	%	0.15
Water absorption, saturation, 23°C	ISO 62	%	0.35
MECHANICAL			
Property	Method	Units	
Yield stress 50 mm/min	ISO 527	MPa	>60
Yield stress 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 strength 2 mm/min	ISO 178	MPa	2300
IMPACT			
Property	Method	Units	
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, unnotched 23°C, 3.0 mm	ISO 180/1U	Kj/m2	70
THERMAL			
Property	Method	Units	
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	7x10^{-5}
Ball pressure test 125 +-2°C	IEC 60695-10-2	-	Pass
Relative Thermal Index, Electrical properties	UL746B	°C	130
Relative Thermal Index, Mechanical properties with impact	UL746B	°C	125
Relative Thermal Index, Mechanical properties without impact	UL746B	°C	125
ELECTRICAL			
Property	Method	Units	
Volume resistivity	IEC 60093	Ohm.cm	>10^{15}
Dielectric strength, in oil, 3.2 mm	IEC 60243-1	kV/mm	18

FIRE RATING			
Property	Method	Units	
Building & Construction			
Europe	EN13501-1	-	b,s1,d0 (2-6mm)
Electrical			
Vertical burn (50W)	UL94V	-	V0 (10mm)
Horizontal burn	UL94 HB	-	HB (0.75-6mm)
Glow Wire Flammability Index	IEC-60695-2-12		Pass 850°C (2-3mm)

* These property values have been derived from LEXAN resin data for the material used to produce Lexan 9030 sheets. Variation within normal tolerances are possible. These typical values are not intended for specification purposes. 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.
Note: LEXAN is a TradeMark of SABIC.

FIRE PERFORMANCE

EUMirror PC mirrors are done with Sabic LEXAN 9030 sheets that have good fire behavior characteristics. LEXAN sheet does not contribute significantly to the spread of fire or the generation of toxic gases. For details, please refer to the fire certificate available in the FAQ section for Distributors.

PRODUCT AVAILABILITY

Standard dimensions in 2050x3050mm, in 2, 3, 4, 5 and 6 mm thickness.
Top side masked with coex transparent PE film.
Rear side water-based protected in flat and matt finishing with clear color. The rear color is slightly changed every year to recognize aging.