

# LEXAN™ MARGARD™ MR5EOBFR SHEET

## PRODUCT DATASHEET

### DESCRIPTION

LEXAN™ MARGARD™ MR5EOBFR sheet is an optical bright opal white, UV, flame retardant and mar resistant glazing material for flat applications only. The intrinsic properties of LEXAN polycarbonate combined with its dual hard coated surface provide: high impact strength and forced entry protection, graffiti resistance, excellent all weather performance, excellent flame retardant, unique seven (7) year limited written warranty against breakage, yellowing, loss of light transmission and coating failure (see limited written warranty).

### TYPICAL PROPERTY VALUES

PROPERTY	TEST METHOD	UNITS	VALUE
<b>PHYSICAL</b>			
Density	ISO 1183	g/cm <sup>3</sup>	1.25
Water absorption, 50% RH, 23 °C	ISO 62	%	0.15
Water absorption, saturation, 23°C	ISO 62	%	0.35
<b>MECHANICAL</b>			
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
Taber haze - 100 cycles, 500 gram, CS-10F	ASTM D1044	%	1 – 3
Taber haze - 500 cycles, 500 gram, CS-10F	ASTM D1044	%	3 - 8
<b>THERMAL</b>			
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 <sup>-5</sup>
Ball pressure test 125 ±2°C	IEC 60695-10-2	-	Pass
<b>ELECTRICAL</b>			
Volume resistivity	IEC 60093	Ohm.cm	>10 <sup>15</sup>
Dielectric strength, in oil, 3.2 mm	IEC 60243-1	kV/mm	18
<b>FIRE RATINGS</b>			
<b>Rail</b>			
France	NF P 92-501	-	3 - 8 mm M2
France	NF F 16-101	-	3 - 8 mm F2

◆ Some of the property values are not intended for specification purposes. If minimum certifiable properties are required please contact your local SABIC, Specialty Film & Sheet representative.

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## IMPACT STRENGTH

Virtually unbreakable, LEXAN MARGARD MR5EOBFR sheet has up to 250 times the impact strength of glass and 30 times that of acrylic. LEXAN sheet offers outstanding impact strength and complies with the majority of international standards.

## CHEMICAL RESISTANCE

LEXAN MARGARD MR5EOBFR sheet's unique coating provides immunity to many chemicals. Surface contact tests on LEXAN MARGARD MR5EOBFR sheet with a wide range of chemicals have proven to have no effect on impact resistance during falling dart testing, proving the excellent fit for LEXAN MARGARD for industrial or aggressive environments. In applications where the product will come into contact with aggressive chemicals, specific testing of the material is always advised.

## FIRE TEST PERFORMANCE

LEXAN MARGARD MR5EOBFR sheet has good fire performance against many national fire codes dependent on thickness and color; please check with the local sales office for details.

## PRODUCT AVAILABILITY

<b>Product Code:</b>	MR5EOBFR sheet
<b>Standard Size:</b>	2000 x 3000 mm
<b>Thicknesses:</b>	3, 4, 5, 6 and 8 mm, other gauges on request
<b>Standard Colors:</b>	WH7D378X, WH6D060X

For MR5EOBFR different dimensions can be made available by prior arrangement. Such arrangements may affect prices, warranty terms and/or conditions of sale.

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