

Description

High abrasion resistant, non weatherable sheet.

Lexan Margard MRA3 sheet is a double-sided coated polycarbonate sheet offering excellent abrasion resistance, excellent dimensional stability, impact resistance and optical clarity, for flat applications only. Typical applications include machine guards and interior glazing.

Typical Property Values ♦

Property	Test Method	Unit	Value
Physical			
Density	ISO 1183	g/cm ³	1.20
Water absorption	Equilibrium	%	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	100
Flexural modulus†)	ISO 178	MPa	2500
Thermal			
Vicat Softening Temp, Rate B /120†)	ISO 306	°C	150
HDT/Be, 0.45 MPa†)	ISO 75/Be	°C	138
Thermal Expansion†)	ASTM D696	1/°C	7x10 ⁻⁵
Optical			
Light transmission (<3mm)	ASTM D1003	%	89.5
Light transmission (4-6mm)	ASTM D1003	%	86
Taber abrasion †)			
CS-10F, 500g, 500 cycles	ASTMD1044	% haze	3

♦ These property values have been derived from Lexan* resin data for the material used to produce this sheet product.

†) The target value for this property is 2-3 % however, the reproducibility of the test method between laboratories is variable in that single, individual measurements can be as high as 5%.

‡) Coating will crack before specified value.

§) Property of the base sheet and/or uncoated side

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Chemical Resistance

Lexan Margard MRA3 sheet has high resistance to most chemicals. In applications where it will come into contact with aggressive chemicals, specific (application related) testing of the material is strongly recommended.

Assembling

Parts made from Lexan Margard MRA3 sheet can be assembled with plastics, metals, rubber and other materials using many types of adhesive bonding, welding and mechanical fastening techniques. Since some of these techniques can cause environmental stress cracking, please ensure that you have carried out tests regarding its suitability for your applications or end use.

Product Availability

Product code: Lexan Margard, MRA3
Standard gauge: 1.00, 2.00, 3.00, 4.00, 6.00, mm
Standard width: for 1.00-2.00 mm: 1220 mm;
for 3.00-6.00 mm: 2000 mm
Maximum length: 3000 mm
Standard colors: clear (112)



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Americas:
SABIC Innovative Plastics
Specialty Film & Sheet
One Plastics Avenue
Pittsfield, MA 01201
USA
Tel. (1) (413) 448 5400
Fax. (1) (413) 448 7506
Toll free: 1-800 451 3147

Europe:
SABIC Innovative Plastics
Specialty Film & Sheet
Plasticslaan 1
NL - 4612 PX Bergen op Zoom
The Netherlands
Tel. (31) (164) 292911
Fax. (31) (164) 293272

Pacific:
SABIC Innovative Plastics
Specialty Film & Sheet
1266 Nanjing Road (W)
16th Floor, Plaza 66
200040 Shanghai, China
Tel. (86) 21 6288 1088
Fax. (86) 21 6288 0818

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