

# LEXAN™ MARGARD™ MRXFR SHEET

## PRODUCT DATASHEET

### DESCRIPTION

High abrasion flame resistant - weatherable, LEXAN™ MARGARD™ MRXFR sheet is a both-side hard coated polycarbonate sheet, used for flat applications only, offering excellent abrasion resistance, excellent dimensional stability, impact resistance, optical clarity. Typical applications can be sound-barriers, separations screens and flat glazing systems needing impact resistance combined with chemical and abrasion resistance. Product cannot be used for cold line bending.

### TYPICAL PROPERTY VALUES

PROPERTY	TEST METHOD	UNITS	VALUE
<b>PHYSICAL</b>			
Density <sup>†)</sup>	ISO 1183	g/cm <sup>3</sup>	1.24
Water absorption 23°C/Sat	ISO 62	%	0.35
<b>MECHANICAL</b>			
Tensile stress, yield <sup>‡)</sup>	ISO 527	MPa	60
Tensile modulus <sup>‡)</sup>	ISO 527	MPa	2350
Elongation, yield <sup>‡)</sup>	ISO 527	%	6
Elongation, break <sup>‡)</sup>	ISO 527	%	100
Flexural strength, yield <sup>‡)</sup>	ISO 178	MPa	90
Flexural modulus <sup>‡)</sup>	ISO 178	MPa	2300
Taber abrasion <sup>‡)</sup>			
CS10F, 500g, 500 cycles (ASTMD1044)	ASTM D1003	% haze	<12
<b>THERMAL</b>			
Vicat Softening Temp, Rate B /120 <sup>‡)</sup>	ISO 306	°C	145
HDT/Be, 0.45 MPa <sup>‡)</sup>	ISO 75/Be	°C	138
Thermal Expansion <sup>‡)</sup>	ISO 11359-2	1/°C	7x10 <sup>-5</sup>
<b>FLAMMABILITY</b>			
Reaction to fire (6mm)	EN13501-1		ClassB,S2,D0
<b>OPTICAL</b>			
Light transmission 3 mm	ASTMD1003	%	91
Light transmission 4 mm	ASTMD1003	%	90
Light transmission 5 mm	ASTMD1003	%	89
Light transmission 6 mm	ASTMD1003	%	89
Light transmission 8 mm	ASTMD1003	%	88
Light transmission 9.5 mm	ASTMD1003	%	87
Light transmission 12 mm	ASTMD1003	%	85
Light transmission 15 mm	ASTMD1003	%	84

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

<sup>†)</sup> The target value for this property is 10% however, the reproducibility of the test method between laboratories is variable in that single, individual measurements can be as high as 12%.

<sup>‡)</sup> Coating will crack before specified value.

<sup>‡)</sup> Property of the base sheet and/or uncoated side

™ LEXAN and MARGARD are trademarks of SABIC.

## CHEMICAL RESISTANCE

LEXAN™ MARGARD™ MRXFR sheet has high resistance at the coated side to many 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 MRXFR 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 <sup>##)</sup>

GAUGE (MM)	WIDTH (MM)	LENGTH (MM)
3.00	2000	3000
4.00	2000	3000
6.00	2000	3000
8.00	2000	3000
9.50	2000	3000
12.0	2000	3000

<sup>##)</sup> From 3.00mm up to and including 12.00mm, other dimensions upon request and are subject to minimum order quantities.

## INSTALLATION

For some applications the ripple orientation may play an important role while installing the LEXAN MARGARD MRXFR sheet. The ripple orientation is indicated for this purpose on the protective masking.

## CLEANING

- Never scrape the sheet with squeegees, razorblades or other sharp instruments.
- Do not clean LEXAN MARGARD MRXFR sheet products under sunny and/or hot environments.
- For removal of paints, marker pen inks, lipstick, and graffiti etc. we recommend to use Butyl Cellulose and products mentioned in the LEXAN solid sheet processing manual. Do not use abrasive or alkaline cleaners.
- To remove labels, stickers etc. the use of kerosene, naphta or white spirit is generally effective.
- After having cleaned the LEXAN MARGARD MRXFR sheet a final wash should be made, using a mild soap solution and finishing with a thorough rinsing with cold water.

## CONTACT US:

### Middle East and Africa

SABIC Global Headquarters  
PO Box 5101  
Riyadh 11422  
Saudi Arabia  
T +966 (0) 1 225 8000  
F +966 (0) 1 225 9000  
E info@sabic.com

### Email

sfs.info@sabic-ip.com

### Americas

Specialty Film & Sheet  
1 Plastics Avenue  
Pittsfield, MA 01201  
USA  
Toll-free 1 800 323 3783  
T 1 413 448 6655  
F (888) 443 2033  
E Spinside.sales@sabic-ip.com

### Europe

Specialty Film & Sheet  
Plasticslaan 1  
4612 PX  
Bergen op Zoom  
The Netherlands  
T +31 (0)164 293678  
F +31 (0)164 293272  
E sfs.info@sabic-ip.com

### Asia Pacific

Specialty Film & Sheet  
2550 Xiupu Road  
Pudong  
201319 Shanghai  
China  
T +86 21 2037 8188  
F +86 21 2037 8288  
E sfs.info@sabic-ip.com

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SAUDI BASIC INDUSTRIES CORPORATION (SABIC) OR ITS SUBSIDIARIES OR AFFILIATES ("SELLER") ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH ARE AVAILABLE UPON REQUEST. INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE GIVEN IN GOOD FAITH. HOWEVER, SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION, WARRANTY OR GUARANTEE (I) THAT ANY RESULTS DESCRIBED IN THIS DOCUMENT WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (II) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN OR APPLICATION INCORPORATING SELLER'S MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS. UNLESS OTHERWISE PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS DESCRIBED IN THIS DOCUMENT. Each user is responsible for making its own determination as to the suitability of Seller's materials, products, services or recommendations for the user's particular use through appropriate end-use and other testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. Statements by Seller concerning a possible use of any material, product, service or design do not, are not intended to, and should not be construed to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of any material, product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates.  
© 2014 Saudi Basic Industries Corporation (SABIC). All Rights Reserved.

<sup>†</sup> Any brands, products or services of other companies referenced in this document are the trademarks, service marks and/or trade names of their respective holders.

[www.sabic.com/sfs](http://www.sabic.com/sfs)

