

# LEXAN™ MARGARD™ FAF SHEET

## PRODUCT DATASHEET

### DESCRIPTION

LEXAN™ MARGARD™ FAF sheet is a coated LEXAN polycarbonate sheet offering long-term anti-fog performance, excellent scratch resistance, formability, impact resistance, dimensional stability, and optical clarity. LEXAN MARGARD FAF sheet also exhibits chemical resistance, tintability, and anti-static properties. It has been specifically developed to offer excellent performance in the visor/eye protection industries and a variety of other applications.

Typical applications include:

- industrial visors and goggles
- sports eyewear
- motorcycle visors
- face shields and windshields
- sunglasses
- instrument lenses and display panels
- mirror and windows
- appliance fascia's

### TYPICAL PROPERTY VALUES ◆

PROPERTY	TEST METHOD	UNITS	VALUE
<b>Physical</b>			
Specific Gravity	ASTM D792	g/cm <sup>3</sup>	1.20
Water Absorption	ASTM D570	%	
24 hours			0.15
Equilibrium			0.35
Fog-Free Time	SABIC Method	Seconds	>30
<b>Scratch Resistance</b>			
Taber Abrasion (CS10F wheels/500g/ 100 cycles)	ASTM D1004	% Haze	<15
Falling Silica (1000g standard sand)	ASTM D968	% Haze	<5
<b>Mechanical</b>			
Dynatup Impact			
(test sample thickness = 0.080")	ASTM D3763	ft.lbs	
Room Temperature			38
0°F			34
<b>Thermal</b>			
Coefficient of Thermal Expansion	ASTM D696	1/°F	3.75x10 <sup>-5</sup>
Heat Deflection Temperature @ 66 psi	ASTM D648	°F	280
Light Transmission	ASTM D1003	%	>88
Yellowness Index			<2
Haze		%	<1

◆ These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local SABIC representative or the SABIC Quality Services Department.

™ Trademark of SABIC.

---

## PROCESSING

LEXAN™ MARGARD™ FAF sheet is an abrasion-resistant, anti-fog product that can be cold or thermal formed, drape formed, and die-cut to shape. Drape forming temperature should not exceed 155°C and thermal forming temperature should not exceed 160°C. Please contact SABIC's Innovative Plastics Technical Services for more information.

## ABRASION RESISTANCE

The excellent abrasion resistance of LEXAN MARGARD FAF sheet is a valuable feature since most coated anti-fog products are either soft or highly water sensitive. LEXAN MARGARD FAF sheet has exhibited abrasion resistance that equals or exceeds most hard-coated flexible plastics.

## ANTI-FOG

LEXAN MARGARD FAF sheet maintains anti-fog characteristics even after repeated cleaning. The anti-fog property is effective in a wide range of temperature and humidity environments.

## FLEXIBILITY

LEXAN MARGARD FAF sheet will not crack or flake off when flexed. It can be cold or thermal formed into small radius curves under recommended conditions.

## CHEMICAL RESISTANCE

LEXAN MARGARD FAF sheet has exhibited high resistance to most moderate chemicals. It is unaffected by brief exposures to most industrial chemicals, solvents, and cleaning reagents. In applications where aggressive chemicals or solvents are involved, specific (application related) testing of the material is strongly recommended.

## ANTI-STATIC

LEXAN MARGARD FAF sheet can dissipate the build-up of electrostatic charges.

## TINTABLE

LEXAN MARGARD FAF sheet can be tinted with commercial ophthalmic dyes, even at ambient temperatures.

## ASSEMBLING

Parts made from LEXAN MARGARD FAF sheet can be assembled with plastics, metals, rubber, and other materials using proper types of adhesive bonding, welding, and mechanical fastening techniques. Since some of these materials can cause environmental stress cracking, please consult SABIC Innovative Plastics for recommendations on specific applications and conduct appropriate application testing.

## PRODUCT AVAILABILITY

LEXAN MARGARD FAF sheet products are available in a range of gauges, sizes, and colors to meet customer needs.

**Designations:** MRFAF1 – One side coated sheet  
MRFAF2 – Two side coated sheet  
**Standard gauges:** .030", .040", .060", .080", .093", .118", .177", and .236"  
**Standard widths:** 48"  
**Standard lengths:** 2 4" – 144"  
**Standard colors:** 112 clear and 5109 bronze

Please contact your local SABIC representative for more information.

---

## 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](mailto:info@sabic.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 [sales.spinside@sabic.com](mailto:sales.spinside@sabic.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.com](mailto:sfs.info@sabic.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.com](mailto:sfs.info@sabic.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 <sup>TM</sup> are trademarks of SABIC or its subsidiaries or affiliates.  
© 2015 Saudi Basic Industries Corporation (SABIC). All Rights Reserved.

<sup>1</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)

