

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 fascias

Typical Property Values ♦

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

♦ These typical values are not intended for specification purposes. If minimum certifiable properties are required please contact your local SABIC Innovative Plastics representative.

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 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

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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 GE-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: 24" – 144"

Standard colors: 112 clear and 5109 bronze

Please consult SABIC Innovative Plastics for more information.



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