

## Description

High abrasion resistant, non-weatherable, Lexan Margard HLGA3 sheet is an improved single-sided coated polycarbonate sheet offering excellent abrasion resistance, excellent dimensional stability, impact resistance, optical clarity and passes DIN 52305 A-AZ<sup>‡</sup>. It is an excellent candidate for glass-Lexan sheet laminates where Lexan Margard HLGA3 sheet is being bonded by means of PU interlayer or polymers to the glass package creating a "no spall" glass/Lexan laminate with improved abrasion resistant properties. Lexan Margard HLGA3 sheet is suitable to be screen-printed at the uncoated side using screen-print links which are compatible with Lexan polycarbonate sheet.

## Typical Property Values ♦

Property	Test Method	Unit	Value
<b>Physical</b>			
Density	ISO 1183	g/cm <sup>3</sup>	1.20
Water absorption, 23° C/sat	ISO 62	%	0.35
<b>Mechanical</b>			
Tensile stress, yield ##)	ISO 527	MPa	60
Tensile modulus ##)	ISO 527	MPa	2350
Elongation, yield ##)	ISO 527	%	6
Elongation, break ##)	ISO 527	%	100
Flexural Strength, yield ## #)	ISO 178	MPa	90
Flexural Modulus ###)	ISO 178	MPa	2300
<b>Thermal</b>			
Vicat Softening Temp, Rate B ###)	ISO 306	°C	145
HDT, 0.45 MPa ###)	ISO 75/Be	°C	138
Thermal Expansion ###)	ISO11359-2	1/°C	7x10 <sup>-5</sup>
<b>Optical</b>			
Light transmission (< 3mm)	ASTM D1003	%	89.5
Light transmission (3-6mm)	ASTM D1003	%	89.5-86
Taber Abrasion <sup>‡)</sup>			
CS10F, 500g, 500 cycles (ASTM D 1044)	ASTM D1003	% haze	< 3
Distortion		DIN 52305-A-AZ	Pass

‡) From 2.50 mm up to including 6.00 mm

♦ 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 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 HLGA3 sheet has high resistance at the coated side to most chemicals. In applications where it will come into contact with aggressive chemicals, specific (application related) testing of the material is strongly recommended.

## Product Availability

**Product Code :** HLGA3 sheet  
**Thicknesses :** 1, 1.5, 2 mm; standard size: 1220 x 2920 mm  
**Thicknesses:** 3, 4, 6, 8 mm; standard size: 2000 x 2920 mm  
**Standard Color:** Clear (112).



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