POLYVANTIS

PRODUCT DATASHEET

LEXAN™ MARGARD™ CTGXT SHEET

DESCRIPTION

LEXAN™ MARGARD™ CTGXT is a two-sided hard coated, UV resistant polycarbonate sheet offering high heat resistance, excellent dimensional stability and impact performance combined with superior optical properties for see-through applications. The clarity, ease at die cutting and formability of LEXAN MARGARD CTGXT makes it an excellent candidate for applications like motor helmet visors, industrial visors and goggles, sport goggles, police helmet visors and sunglasses.

TYPICAL PROPERTY VALUES*

PROPERTY	TEST METHOD	UNITS	VALUE
PHYSICAL			
Density	ISO 1183	g/cm³	1.20
Water absorption, 50% RH, 23 °C	ISO 62	%	0.15
Water absorption, saturation, 23°C	ISO 62	%	0.35
MECHANICAL			
Yield stress 50 mm/min	ISO 527	MPa	>60
Yield strain 50 mm/min	ISO 527	%	6
Nominal strain at break 50 mm/min	ISO 527	%	>100
Tensile modulus 1 mm/min	ISO 527	MPa	2300
Flexural strength 2 mm/min	ISO 178	MPa	90
Flexural modulus 2 mm/min	ISO 178	MPa	2300
Taber haze - 100 cycles, 500-gram, CS-10F	ASTM D1044	%	4 - 8
THERMAL			
Vicat softening temperature, B/120	ISO 306	°C	145
Temperature of deflection under load (type A), 1.8 MPa, flat	ISO 75-2	°C	127
Thermal conductivity	ISO 8302	W/m.°C	0.2
Coefficient of linear thermal expansion, 23-55°C	ISO 11359-2	1/°C	$7x10^{-5}$
Ball pressure test 125 ±2°C	IEC 60695-10-2	-	Pass
ELECTRICAL			
Volume resistivity	IEC 60093	Ohm.cm	$>10^{15}$
Dielectric strength, in oil, 3.2 mm	IEC 60243-1	kV/mm	18
OPTICAL			
Light transmission 0.75 mm	ASTM D 1003	%	92
Light transmission 1- 2 mm	ASTM D 1003	%	91

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

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PROCESSING

Masking must be removed from the sheet within 6 months after delivery.

UV PROTECTION

LEXAN™ MARGARD™ CTGXT sheet has proprietary UV protected surfaces, giving excellent durability to outdoor weathering and comes with a 5-year limited written warranty (see warranty for details).

CHEMICAL RESISTANCE

LEXAN MARGARD CTGXT sheet has high resistance to most moderate chemicals. In applications where it will come into contact with aggressive chemicals, specific (application related) testing of the material is strongly recommended. A cleaning solution is offered.

SAFETY

The processing guidance given in this documentation is given in good faith and the trust that in all cases you wear the correct Personal Protective Equipment (PPE), e.g. helmet, proper gloves, safety goggles etc. to safely fabricate, e.g. (but not limited to) sawing, cutting, forming our sheets and films. In all cases you should follow local and national regulations around the wear of PPE's prescribed or mandatory to perform these tasks in a safely manor.

PRODUCT AVAILABILITY

Product code:	**LEXAN™ MARGARD™ CTGXT**
Gauges:	0.75-5mm
Standard size:	1220 x 2920mm
Color:	Clear 112

POLYVANTIS

Polycarbonate products are sold globally under the trademark LEXAN™ Film & Sheet, owned by SABIC or its subsidiaries or affiliates.

www.polyvantis.com

LEXAN™ POLYCARBONATE FILM & SHEET Tough, Virtually Unbreakable

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