POLYVANTIS

PRODUCT DATASHEET

PLASTECH™ LX2 SHEET

DESCRIPTION

PLASTECH™ LX2 sheet is a transparent polycarbonate sheet with proprietary UV protection on both sides offering excellent weathering properties. With its excellent impact resistance it is a good candidate for a wide variety of building and construction application. PLASTECH LX2 sheet can be easily cold formed into gentle curves which makes it a good material choice for skylights, covered walkways, barrel vaults etc. PLASTECH LX2 sheet is thermoformable and can be thermoformed into the desired geometry whilst retaining the UV resistant protection specially developed for weather resistant applications.

TYPICAL PROPERTY VALUES*

Property	Test Method	Units	Value
PHYSICAL			
Density	ISO 1183	g/cm^3	1.20
Water Absorption, 50% RH, 23 °C	ISO 62	%	0.15
Water Absorption, saturation, 23 °C	ISO 62	%	0.35
MECHANICAL			
Tensile Strength at Yield 50 mm/min	ISO 527	MPa	>60
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
IMPACT			
Charpy Impact, notched 23°C, 3.0mm	ISO 179/1eA	KJ/m^2	75
Izod Impact, unnotched 23°C, 3.0mm	ISO 180/1U	KJ/m^2	NB
Izod Impact, notched 23°C, 3.0mm	ISO 180/1A	KJ/m^2	70
THERMAL			
Vicat Softening Temperature, rate B/120	ISO 306	°C	145
Temperature of Deflection under Load (type A), 1.8MPa, 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	7×10^{-5}
Ball Pressure Test 125±2°C	IEC 60695-10-2	-	Pass
Relative Thermal Index, Electrical Properties	UL746B	°C	130
Relative Thermal Index, Mechanical Properties with Impact	UL746B	°C	125
Relative Thermal Index, Mechanical Properties without impact	UL746B	°C	125
ELECTRICAL			
Volume Resistivity	IEC 60093	Ohm.cm	$>10^{15}$
Dielectric Strength, in oil, 3.2mm	IEC 60243-1	kV/mm	18

- These property values have been derived from LEXAN™ resin data for the material used to produce this sheet product. Variation within normal tolerances are possible for various colors. These typical values are not intended for specification purposes. If minimum certifiable properties are required please contact your local POLYVANTIS, Specialty Film & Sheet representative. All values are measured at least after 48 hours storage at 23°C/50% relative humidity. All properties are measured on injection molded samples. All samples are prepared according ISO 294.

PRODUCT AVAILABILITY

PLASTECH™ LX2 sheet is normally manufactured in the standard sizes listed below. Deliveries from stock or cut to size can be ordered via our customer service organization.

Standard Gauge in mm:	2 – 3 – 4 – 5 – 6 – 8 – 9.5 – 12
Standard sizes:	1250mm x 2050mm, 1220mm x 2440mm (<6mm), 2050 x 3050mm
Standard Gauge in mm:	2 – 2.7 – 3 – 4 – 5
Standard sizes:	1220mm x roll, 2100mm x roll

POLYVANTIS

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LEXAN™ POLYCARBONATE FILM & SHEET Tough, Virtually Unbreakable

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