POLYVANTIS

PRODUCT DATASHEET

LEXAN™ EXELLDSTP SHEET

DESCRIPTION

LEXAN™ EXELLDSTP sheet is a textured polycarbonate sheet with UV protection on both sides, offering excellent light diffusion without transparency. It has an excellent impact resistance, an excellent fire performance, ease of handling and installation and is an excellent candidate for wide variety of exterior and interior applications such as balcony and staircase glazing.

TYPICAL PROPERTY VALUES*

PROPERTY	TEST METHOD	UNITS	VALUE
PHYSICAL			
Density	ISO 1183	g/cm³	1.2
Water Absorption, (23°C/sat)	ISO 62	%	0.35
Moisture Absorption (23°C / 50% RH)	ISO 62	%	0.15
MECHANICAL			
Tensile Stress, yield, 50 mm/min	ISO 527	MPa	63
Tensile Strain, yield, 50 mm/min	ISO 527	%	6
Tensile Strain, break, 50 mm/min	ISO 527	%	120
Tensile Modulus, 1 mm/min	ISO 527	MPa	2350
Flexural Stress, yield, 2 mm/min	ISO 178	MPa	90
Flexural Modulus, 2 mm/min	ISO 178	MPa	2300
IMPACT			
Izod Impact, unnotched 80*10*3 +23°C	ISO 180/1U	kJ/m²	NB
Izod Impact, notched 80*10*3 +23°C	ISO 180/1A	kJ/m²	70
Charpy Impact, notched, 23°C	ISO 179/2C	kJ/m²	35
THERMAL			
Thermal Conductivity	ISO 8302	W/m-°C	0.2
CTE, 23°C to 80°C, flow	ISO 11359-2	1/°C	7.E-05
Ball Pressure Test, 125°C +/- 2°C	IEC 60695-10-2	-	PASSES
Vicat Softening Temp, Rate B/120	ISO 306	°C	145
Relative Temp Index, Elec	UL 746B	°C	130
Relative Temp Index, Mech w/impact	UL 746B	°C	130
Relative Temp Index, Mech w/o impact	UL 746B	°C	130
Electrical			
Volume Resistivity	IEC 60093	Ohm-cm	>1.E+15
Dielectric Strength, in oil, 3.2 mm	IEC 60243-1	kV/mm	17

* These property values have been derived from 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, Functional Forms 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 to ISO 294.

Chemical Resistance

LEXAN™ EXELLDSTP sheet has sufficient resistance to most chemical substances encountered in normal exterior use. In applications where the product will come into contact with aggressive chemicals, specific (application related) testing of the material is always advised. It is essential to check the compatibility before use.

Light Transmission

Color/Gauge	Light Transmission (%)	SHGC*
Clear 112/2mm-8mm	>72%	0.82 for 2mm 0.80 for 3mm & 4mm
Bronze 515081/2mm-4mm	Min.47% to Max.53%	0.62 for 2mm 0.63 for 3mm
White WH7D136O/2mm	Min.57% to Max.63%	0.66 for 2mm
White WH7D136O/3mm	Min.47% to Max.63%	0.63 for 3mm

*These are typical values

LEXAN™ EXELLDSTP is essential opaque to all wavelengths below 385 nanometers. This useful shielding property can help prevent discoloration of sensitive materials placed under or behind LEXAN™ EXELLDSTP sheet.

UV Protection

LEXAN™ EXELLDSTP sheet has proprietary UV protected surfaces, giving excellent durability to outdoor weathering. This superior UV resistance and toughness of LEXAN™ EXELLDSTP sheet is backed by 10 years limited written warranty against yellowing, loss of light transmission and breakage. See Warranty for exact details.

Fire Performance

LEXAN™ EXELLDSTP sheet has good fire behavior characteristics. LEXAN sheet does not contribute significantly to the spread of fire or to the generation of toxic gases. For details, please contact your local sales office.

Product Availability*

Product code	LEXAN™ EXELLDSTP Sheet
Gauge & Color	2, 3, 4, 5, 6, 8 mm (Clear 112 & Bronze 515081), 2, 3mm (White WH7D136O)
Standard width	1220mm and 2050 mm
Standard length	30500mm in 2 & 3 mm & 12200mm in 4mm only. Both are available in Roll form only
Textures	Polished one side, pebble texture on reverse.
Masking	LEXAN™ printed masking on one side (Polished)

LEXAN™ EXELLDSTP sheet can be supplied by prior arrangements in non - standard widths, lengths, and color. Such arrangements may affect prices, terms and/or other conditions of sales and are subject to minimum order quantities. *For more specific details, please refer Baroda Product Guide.

POLYVANTIS

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LEXAN™ POLYCARBONATE FILM & SHEET | Tough, Virtually Unbreakable

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