POLYVANTIS

PRODUCT DATASHEET

LEXAN™ SPLUX24 SHEET

DESCRIPTION

LEXAN™ SPLUX24 sheet is white polycarbonate sheets with both sides UV protection for improved weatherability with unique light diffusing properties for an application in variety of sign and lighting industry applications ranging from light covers, backlighted and pole mounted signs. These diffusion sheets are filled with different levels of light-scattering agent, which provides good hiding power for LED hot spots while maintaining high light transmission. These sheets are having non-brominated and non-chlorinated FR systems as unique ingredients offered for high-end applications.

TYPICAL PROPERTY VALUES*

PROPERTY	TEST METHOD	UNITS	VALUE	
PHYSICAL				
Density	ISO 1183	g/cm³	1.2	
Moisture Absorption (23°C / 50% RH)	ISO 62	%	0.15	
MECHANICAL				
Tensile Strength at yield, 50 mm/min	ISO 527	MPa	62	
Tensile Strain at break, 50 mm/min	ISO 527	%	75	
Tensile Modulus ,1 mm/min	ISO 527	ISO 527 MPa		
Flexural Stress at break, 12.5 mm/min	ISO 178	MPa	95	
Flexural Modulus, 2mm/min	ISO 178	MPa	2250	
THERMAL				
CTE, -40°C to 40°C, x flow	ASTM E 831	1/°C	6.7E ⁻⁰⁵	
ELECTRICAL				
Hot Wire Ignition	UL746A	PLC Code	3	
High Ampere Arc Ign, surface	UL746A	PLC Code	1	
Comparative Tracking Index (UL)	UL746A	PLC Code	3	

These property values have been derived from LEXAN™ resin data for the material used to produce this sheet product.

PROPERTY	TEST METHOD	UNITS	VALUE
FIRE RATINGS+			
Electrical			
Vertical burn	UL94-V	-	V2 (1.5-2.2mm)

⁺ These property values have been derived from Sheet product.

UV Protection

LEXAN™ SPLUX24 sheet has proprietary UV protected surfaces, giving excellent durability to outdoor weathering. This superior UV resistance and toughness of LEXAN™ SPLUX24 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™ SPLUX24 sheet has good fire behavior characteristics & is UL certified. LEXAN™ SPLUX24 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 with Light Transmission

Product	Texture	Gauge (mm)	Standard sizes (mm)	Light Transmission# (%)	DLD ^{#*} (°)	SHGC⁺
SPLUX24-WH8E492X	Polish/polish	1.5	1220 x 2440	70	41	0.71
SPLUX24-WH8E492X	Polish/polish	2.0	1220 x 2440	67	50	0.66

[#] Light transmission & Degree of light dispersion (DLD) may vary $\pm 5~\%.$







^{*} Degree of light dispersion is an angle at which half of the luminance of the incident light is observed. Higher DLD is indicative of better hiding power.

^{*}These are typical values.