POLYVANTIS

PRODUCT DATASHEET

LEXAN™ DLCW SHEET

DESCRIPTION

LEXAN™ DLCW Light Diffusion is a translucent polycarbonate sheet with unique light diffusing properties designed for
indoor LED and conventional lighting fixtures. It features a unique combination of high light diffusion and high light
transmission through a combination of optimized surface texture and advanced diffuser technology. This extruded
polycarbonate sheet offers significant advantages over many other materials in terms of bright and uniform illumination,
excellent impact resistance, design freedom and aesthetics. The sheet has a matte finish on one side and on the other side a polish finish.

TYPICAL PROPERTY VALUES*

PROPERTIES	Unit	Typical Value (♦)	Test Method
PHYSICAL			
Specific Gravity	-	1.2	ASTM D729
Moisture Absorption	%	.25	ASTM D570
MECHANICAL			
Elongation	%	110	ASTM D638
Tensile Strength @ Yield	MPa	61	ASTM D638
Tensile Strength ultimate	MPa	65	ASTM D638
Tensile Modulus	MPa	2510	ASTM D638
Flexural Strength	MPa	93	ASTM D790
Flexural Modulus	MPa	2201	ASTM D790
Izod Impact Notched	j/cm	6.4	ASTM D256A
Unnotched	j/cm	32	ASTM D256A
Shear Strength @ Yield	MPa	40	ASTM D732
Shear Modulus	MPa	786	ASTMD732
THERMAL			
Coefficient of Thermal Expansion	cm/cm/C	$6.75x10^{-5}$	ASTM D696
OPTICAL			
Light Transmission	%	60-85	Internal
FLAMMABILITY			
UL flammability		HB	UL94

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

DLCW is f1 rated as suitable for outdoor use with respect to exposure to ultraviolet light, water exposure and immersion in accordance with UL 746C

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LEXAN™ POLYCARBONATE FILM & SHEET Tough, Virtually Unbreakable

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