

LEXAN™ DL8B25 FILM

PRODUCT DATASHEET

DESCRIPTION

LEXAN™ DL8B25 is low gloss light diffusion translucent polycarbonate film. 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 film offers significant advantages over many other materials in terms of bright and uniform illumination, excellent impact resistance and aesthetics. Typical applications are backlit displays, automotive instrument panels, mass transportation and EV infrastructure.

TYPICAL PROPERTY VALUES

PROPERTY	ASTM TEST METHOD	UNITS (USCS)	VALUE
PHYSICAL			
Specific Gravity	ASTM D792	-	1.2
Water Absorption, 24 hrs.	ASTM D570	%	0.25
MECHANICAL			
Elongation	ASTM D638	%	110
Tensile Strength @ Yield	ASTM D638	MPa	62
Tensile Strength @ break	ASTM D638	MPa	74
Tensile Modulus	ASTM D638	MPa	2580
Flexural Strength	ASTM D790	MPa	93
Flexural Modulus	ASTM D790	MPa	2200
Tear Strength - Initiation	ASTM D1004	kN/m	236
Tear Strength - Propagation	ASTM D1922	kN/m	10-20
Izod Impact Notched	ASTM D256A	J/cm	6.2
Izod impact Unnotched	ASTM D256A	J/cm	32
THERMAL			
Coefficient of Thermal Expansion	ASTM D696	($\times 10^{-5}/^{\circ}\text{C}$)	6.75

◆ These property values have been derived from LEXAN™ resin data for the material used to produce this film 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 SABIC, 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 or 20mils films.

PROPERTY	ASTM TEST METHOD	UNITS (USCS)	VALUE
OPTICAL			
Light Transmission	ASTM D1003	%	60-80
Yellowness Index 0.02" gauge	ASTM E313 (D65-10)	-	-12.7
Gloss 60° Velvet 0.02" gauge	ASTM D523-60	-	6.1
Gloss 60° Matte 0.02" gauge	ASTM D523-60	-	4.0 (screened)

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MANUFACTURING SPECIFICATIONS

NOMINAL GAUGE RANGES	MIN./MAX LIMIT OF NOMINAL
0.010-0.015" (0.250-0.375 mm)	± 5%
0.020-0.035" (0.50-0.89mm)	± 3%

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