

FUNCTIONAL FORMS

LEXAN™ DL8B25 FILM

PRODUCT DATASHEET

DESCRIPTION

LEXAN™ DL8B25 is low gloss light diffusion translucent polycarbonate film, which has 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 film offers significant advantages over many other materials in terms of bright and uniform illumination, excellent impact resistance and aesthetics.

TYPICAL PROPERTY VALUES ♦

PROPERTIES	Unit	Typical Value (♦)	Test Method
PHYSICAL			
Specific Gravity	-	1.2	ASTM D729
Moisture Absorption	%	0.25	ASTM D570
MECHANICAL			
Elongation	%	110	ASTM D638
Tensile Strength @ Yield	MPa	62	ASTM D638
Tensile Strength @ break	MPa	74	ASTM D638
Tensile Modulus	MPa	2580	ASTM D638
Flexural Strength	MPa	93	ASTM D790
Flexural Modulus	MPa	2200	ASTM D790
Tear Strength - Initiation	kN/m	236	ASTM D1004
Tear Strength - Propagation	kN/m	10 - 20	ASTM D1922
Izod Impact Notched	J/cm	6.2	ASTM D256A
Izod impact Unnotched	J/cm	32	ASTM D256A
THERMAL			
Coefficient of Thermal Expansion	cm/cm.deg C	6.75x10-5	ASTM D696

- ♦ 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 colours. These typical values are not intended for specification purposes. If minimum certifiable properties are required please contact your local SABIC, 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 moulded samples or 20mils films.
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OPTICAL

Light Transmission	%	60-80	ASTM D1003
Yellowness Index 0.02" gauge	-	- 12.7	ASTM E313 (D65-10)
Gloss 60° Velvet 0.02" gauge	-	6.1	ASTM D523-60
Gloss 60° Matte 0.02" gauge	-	4.0 (screened)	ASTM D523-60

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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