

# LEXAN™ SD8B24L FILM

## PRODUCT DATASHEET

### DESCRIPTION

LEXAN™ SD8B24L film is a one side fine velvet (FV), one side matt (M) white opaque polycarbonate film that is typically used in government security documents, such as passport data pages, ID cards, driving licenses, ... It offers great printability and ease of processing (laminating, die cutting, and embossing). LEXAN SD8B24L film is available in gauges ranging from 50 – 620 µm and in color WH9B246.

### TYPICAL PROPERTY VALUES

PROPERTY	ASTM TEST METHOD	UNITS (USCS)	VALUE	ISO TEST METHOD	UNITS (SI)	VALUE
<b>MECHANICAL</b>						
Tensile Strength @ Yield	ASTM D882	psi	7542	ISO 527	MPa	56
Ultimate	ASTM D882	psi	7687	ISO 527	MPa	56
Tensile Modulus	ASTM D882	psi	355 x10 <sup>3</sup>	ISO 527	MPa	2450
Tensile Elongation at Break	ASTM D882	%	50	ISO 527	%	50
Tear Strength						
Initiation	ASTM D1004	lbf	12	ASTM D1004	N	53
Propagation	ASTM D1938	lbf	0.6	ASTM D1938	N	2.5
<b>THERMAL</b>						
Coefficient of Thermal Expansion, flow	ASTM E831	(x 10 <sup>-5</sup> / °F)	3.9	ISO 11359	(x 10 <sup>-5</sup> / °C)	7.1
Glass Transition Temperature	ASTM D3418	°F	300	ISO 11357	°C	149
Vicat Softening Temperature, B50	ASTM 1525	°F	297	ISO 306	°C	147
Heat Deflection Temp. Af 120°C/h	ASTM D648	°F	270	ISO 75 Modified	°C	132
Shrinkage at 130°C, 30min	Internal method	%	0.10	Internal method	%	0.10
<b>PHYSICAL</b>						
Density	ASTM D792	slug/ft3	2.6	ISO 1183	g/cm3	1.34
Water Absorption, 24 hrs.	ASTM D570	% change	0.12	ISO 62	% change	0.12
Surface Roughness Ra		µin	35 [M]	ISO4288	µm	0.9 [M]
Surface Roughness R3z		µin	87 [FV] 173 [M]	ISO4288	µm	2.2 [FV] 4.4 [M]
Surface Tension	Dyne solutions	Dyne/cm	465 [FV] 44 [M] 39 [FV]	Dyne solutions	Dyne/cm	11.8 [FV] 44 [M] 39 [FV]
			WH9B246			WH9B246
<b>OPTICAL</b>						
Light Transmission	ASTM D1003	%	2.14	ASTM D1003	%	2.14
Optical density			1.67			1.67
Color:	CIELab, Reflection,			CIELab, Reflection,		
L-value	D65, 10°		94.79	D65, 10°		94.79
a-value			-0.09			-0.09
b-value			-2.31			-2.31

◆ These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local SABIC representative or the SABIC Quality Services Department. Reported Values are based on 0.250 mm (0.010") thickness film, except for the Coefficient of thermal expansion, Vicat softening temperature, Heat deflection temperature and water absorption, which are based on molded parts.

™ Trademark of SABIC.

---

## MANUFACTURING SPECIFICATIONS

---

NOMINAL GAUGE RANGES	MIN./MAX LIMIT OF NOMINAL
0.050 - < 0.250 mm	± 5%
0.250 – 0.620 mm	± 2.5%

---

---

Distributed by:



[www.polymerfilms.com](http://www.polymerfilms.com)

**Film East:** Tyngsboro, MA | 978-226-0021  
**Film Central:** Naperville, IL | 630-428-4350  
**Film West:** Fresno, CA | 559-383-3456  
**Film Canada:** Brampton, ON | 905-789-3100  
**Film Mexico:** Apodaca, Nuevo León | 52-81-8369-4688

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF SAUDI BASIC INDUSTRIES CORPORATION (SABIC) OR ITS SUBSIDIARIES OR AFFILIATES ("SELLER") ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH ARE AVAILABLE UPON REQUEST. INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE GIVEN IN GOOD FAITH. HOWEVER, SELLER MAKES NO EXPRESS OR IMPLIED REPRESENTATION, WARRANTY OR GUARANTEE (i) THAT ANY RESULTS DESCRIBED IN THIS DOCUMENT WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN OR APPLICATION INCORPORATING SELLER'S MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS. UNLESS OTHERWISE PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS, SERVICES OR RECOMMENDATIONS DESCRIBED IN THIS DOCUMENT. Each user is responsible for making its own determination as to the suitability of Seller's materials, products, services or recommendations for the user's particular use through appropriate end-use and other testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. Statements by Seller concerning a possible use of any material, product, service or design do not, are not intended to, and should not be construed to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of any material, product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC and brands marked with <sup>TM</sup> are trademarks of SABIC or its subsidiaries or affiliates.  
© 2017 Saudi Basic Industries Corporation (SABIC). All Rights Reserved.

<sup>†</sup>Any brands, products or services of other companies referenced in this document are the trademarks, service marks and/or trade names of their respective holders.



Rev. 30/05/2017

---