Lexan* SD8B24 Film

Product Datasheet

Description
Lexan* SD8B24 film is a one side fine velvet (FV), one side fine matt (FM) white opaque polycarbonate film that has specifically been designed to be 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, embossing). Lexan SD8B24 film is available in gauges ranging from 75 - 620 μm and in color WH9B246.

Typical Property Values ◆

Property	ASTM Test Method	Units (USCS)	Value	ISO Test Method	Units (SI)	Value
Mechanical						
Tensile Strength @ Yield Ultimate Tensile Modulus Tensile Elongation at Break Tear Strength	ASTM D882 ASTM D882 ASTM D882 ASTM D882	psi psi psi %	7542 7687 355 x10 ³ 50	ISO 527 ISO 527 ISO 527 ISO 527	MPa MPa MPa %	52 53 2450 50
Initiation Propagation	ASTM D1004 ASTM D1938	lbf lbf	12 0.6	ASTM D1004 ASTM D1938	N N	53 2.5
Thermal						
Coefficient of Thermal Expansion, flow Glass Transition Temperature Vicat Softening Temperature, B50 Heat Deflection Temp, Af 120°C/h Shrinkage at 130°C, 30min	ASTM E831 ASTM D3418 ASTM 1525 ASTM D648 Internal method	(x 10 ⁻⁵ / °F) °F °F °F	3.9 300 297 270 0.10	ISO 11359 ISO 11357 ISO 306 ISO 75 Modified Internal method	(x 10-5 / °C) °C °C °C °C	7.1 149 147 132 0.10
Physical						
Density Water Absorption, 24 hrs. Surface Roughness Ra	ASTM D792 ASTM D570	slug/ft³ % change µin	2.6 0.12 35 [VFM] 87 [FV]	ISO 1183 ISO 62 ISO4288	g/cm³ % change µm	1.34 0.12 0.9 [VFM] 2.2 [FV]
Surface Roughness R3z		μin	173 [VFM] 465 [FV]	ISO4288	μm	4.4 [VFM] 11.8 [FV]
Surface Tension	Dyne solutions	Dyne/cm	44 [FM] 39 [FV]	Dyne solutions	Dyne/cm	11.6 [FV] 44 [FM] 39 [FV]
Optical			WH9B246			WH9B246
Light Transmission Optical density Color:	ASTM D1003	%	2.14 1.67	ASTM D1003 CIELab, Reflection,	%	2.14 1.67
L-value a-value b-value	CIELab, Reflection, D65, 10°		94.79 -0.09 -2.31	D65, 10°		94.79 -0.09 -2.31

Manufacturing Specifications

Nominal Gauge	Min./Max Limit
Ranges	of Nominal
0.075 - < 0.250 mm	± 5%
0.250 - 0.620 mm	± 2.5%

- These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local SABIC Innovative Plastics, Specialty Film & Sheet representative or the 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.
- Trademarks of SABIC Innovative Plastics IP BV





Product Datasheet



* Trademark of SABIC Innovative Plastics IP BV

Americas: SABIC Innovative Plastics Specialty Film & Sheet One Plastics Avenue Pittsfield, MA 01201 USA Tel. (1) (413) 448 5400

Tel. (1) (413) 448 5400 Fax. (1) (413) 448 7506 Toll free: 1-800 451 3147 Europe: SABIC Innovative Plastics Specialty Film & Sheet Plasticslaan 1 NL - 4612 PX Bergen op Zoom The Netherlands Tel. (31) (164) 292911 Fax. (31) (164) 293272 Pacific: SABIC Innovative Plastics Specialty Film & Sheet 1266 Nanjin Road (W) Plaza 66, 17th Floor 200040 Shanghai, China Tel. (86) 21 62881088 Fax. (86) 21 62880818

THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BV, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT http://www.sabic-ip.com AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER'S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller's products, services or recommendations for the user's particular use through appropriate end-use 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. No statement by Seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

SABIC Innovative Plastics is a trademark of SABIC Holding Europe BV

* Trademark of SABIC Innovative Plastics IP BV