

Lexan* Film



High Security

Lexan SD film for security documents

Leading-edge material for identity cards

SABIC Innovative Plastics introduces the new Lexan® SD films to manufacturers to meet safety, aesthetic, and performance requirements in identity and security cards, while at the same time improving card durability.

Identity theft, border security and other threats are expanding the use of electronic identity cards that can resist compromise, last for up to 10 years, and incorporate a variety of sophisticated graphics technologies including laser marking. To meet these challenges, SABIC Innovative Plastics has developed a new material for manufacturing security documents and electronic ID cards that features three new grades of Lexan polycarbonate film: a laser-markable grade, a bright white opaque material, and a clear grade for the cover or intermediate layers. These films offer tight gauge tolerances to simplify the manufacturing of cards within mandated thickness parameters. They also provide high performance and exceptional durability without the need for adhesives.

SABIC Innovative Plastics' investment in new products enables the company to provide converters with innovative solutions to meet today's information security needs.

Features and potential benefits

- High temperature resistance
- Low and controlled shrinkage for improved flatness before and after lamination
- Surface textures optimized for printing, hot stamping and lamination
- Tight gauge tolerance for controlled stack tolerance after lamination
- High quality optical films, manufactured in a clean room environment
- Maximized opacity in white layer for enhanced ability to hide embedded security devices at thin gauges
- Excellent laser markability of the SD8B94 clear film

Potential applications:

- Drivers licenses
- E-Passport data pages
- Border crossing cards
- Residency permits
- Green cards
- Military and police ID
- Smart cards inlays
- Tachometer cards
- Healthcare cards
- Government employees ID
- Vehicle registration tags



EXCEPTIONAL
DURABILITY

Materials specifically designed for consistent high quality

SABIC Innovative Plastics' new Lexan® film solution for electronic security documents surpasses conventional materials in several ways. The Lexan films use heat and pressure to join all layers into a card that cannot be pulled apart, as compared to hybrid cards which all require adhesives that put the card at risk for disassembly. A second major advantage is that the SABIC Innovative Plastics films deliver very narrow gauge tolerances of +/- 2.5 percent. Compared to existing solutions with wider gauge variations, this property helps converters consistently assemble multi-layer cards within the mandated thickness range. Further, it avoids the need to double-stock certain gauges to compensate for poor lot-to-lot consistency.

All three materials have a fine velvet finish on one side and a fine matte texture on the other. All feature low and controlled shrinkage for optimal flatness before and after lamination. They are produced in a clean room environment.

Lexan SD8B14 film

Clear polycarbonate film for overlay or intermediate layers that delivers improved durability and temperature resistance over existing materials.

This one side fine velvet / one side fine matte film is available in gauges ranging from 50 – 400µm with tight tolerance specification of +/-5% < 249µm, and +/- 2.5% from 250 – 400µm.



Lexan SD8B24 film

Opaque white polycarbonate film with excellent opacity designed to hide embedded security devices at very thin gauge. This one side fine velvet / one side fine matte film is available in gauges from 75µm – 620µm with tight gauge tolerance of +/-5% < 249µm, and +/- 2.5% from 250µm - 620µm.

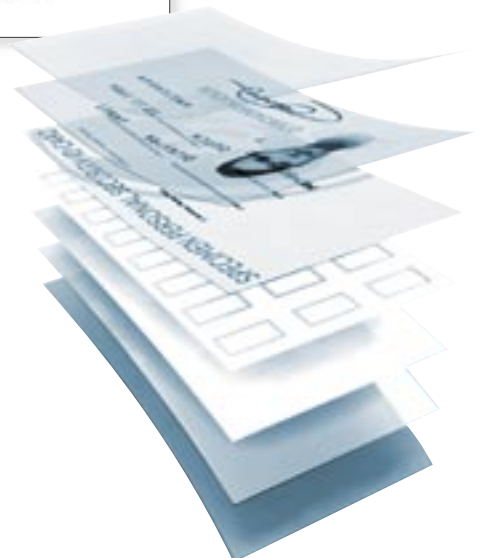
Lexan SD8B94 film

Transparent polycarbonate film is laser markable to deliver dark type face and precise images building counterfeit resistant security into the card. This one side fine velvet / one side fine matte film is available in 50, 100 and 150µm gauges with maximum tolerance of +/-5% .



Suitable for wide range of printing technologies

In addition to laser marking, these films are well-suited for various types of printing and security features. They can be screen printed or offset printed as well as hot-stamped (hologram or kinegram). Other technologies include microprinting, infrared- or UV- sensitive printing, guilloche printing and incorporation of RFID.



HIGH PERFORMANCE
TO MATCH SECURITY NEEDS

Availability

Lexan* SD8B14 film	Gauge		Length		Weight	
	µm	mils	m	ft	kg	lbs
Texture: fine velvet / fine matte Color: 112 (transparent) Roll width: 1220mm (48 inch) Minimum order quantity: 6 rolls	50	2	1940	6365	142	313
	100	4	970	3182	142	313
	125	5	640	2100	117	258
	150	6	640	2100	140	309
	175	7	457	1499	117	258
	200	8	400	1312	117	258
	250	10	400	1312	120	265
	300	12	320	1050	140	309
	375	15	228	748	125	276
	400	16	228	748	133	293
Lexan SD8B24 film	Gauge		Length		Weight	
Texture: fine velvet / fine matte Color: WH9B246 (opaque white) Roll width: 1220mm (48 inch) Minimum order quantity: 6 rolls	µm	mils	m	ft	kg	lbs
	75	3	1290	4232	158	348
	100	4	970	3182	158	348
	125	5	640	2100	131	289
	150	6	640	2100	156	345
	175	7	457	1499	131	288
	200	8	400	1312	131	289
	220	9	400	1312	144	317
	250	10	327	1073	133	293
	300	12	320	1050	157	346
	400	16	228	748	149	328
	450	18	215	705	158	348
	500	20	175	574	143	315
	620	25	140	459	142	313
Lexan SD8B94 film	Gauge		Length		Weight	
Texture: fine velvet / fine matte Color: NA9D070T (clear laser markable) Roll width: 1220mm (48 inch) Minimum order quantity: 6 rolls	µm	mils	m	ft	kg	lbs
	50	2	1940	6365	142	313
	100	4	970	3182	142	313
	150	6	640	2100	140	309

For customized sizes please contact your local representative

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