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SECURITY+ PERFORMANCE

LEXAN™ SD POLYCARBONATE FILM
FOR SECURITY DOCUMENTS



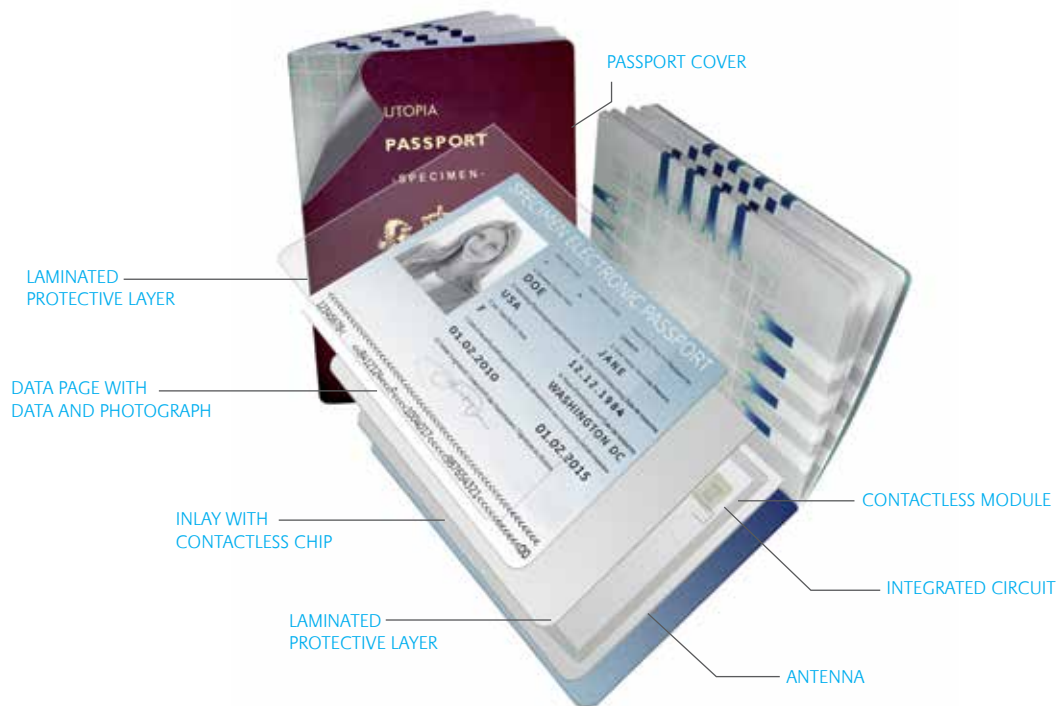
LEADING-EDGE MATERIALS FOR IDENTIFICATION (ID) CARDS

Identity theft, counterfeiting and other serious threats call for constant vigilance and innovation in electronic ID card design.

SABIC offers a high-performance polycarbonate (PC) LEXAN™ SD film portfolio specially designed for easy manufacturing and lamination of complex secure ID cards with thin layers. LEXAN Secure ID film portfolio include a lasermarkable grade, a bright white, opaque grade and a clear grade for the cover or intermediate layers. These films offer tight gauge tolerances to simplify manufacture of cards within mandated thickness parameters. They also provide high performance and exceptional durability without the need for adhesives.

SABIC has recently introduced new breakthrough LEXAN polycarbonate (PC) film technologies - LEXAN SDCX co-extruded film and LEXAN SC8A12E/SC8A92E flexible hard-coated films.

These new products directly address accelerating industry trends calling for more and thinner card layers to accommodate additional, enhanced safety features and provide easy processing and enhanced durability for ID cards and other security documents.



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 optical quality films, manufactured in a clean room environment
- Maximized opacity in white layer to enhanced ability to hide embedded security devices at thin gauges
- Excellent laser markability of the clear laser markable film

Potential Applications:

- ID cards
- 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

MATERIALS SPECIFICALLY DESIGNED FOR CONSISTENT HIGH QUALITY

SABIC's LEXAN™ film solutions for electronic security documents surpass conventional materials in several ways.

Thanks to the low and controlled shrinkage of the LEXAN films, manufacturers can use heat and pressure to join all layers together to form a card that cannot be pulled apart, as compared to hybrid cards which all require adhesives that put the card at risk for disassembly. Another advantage is that the SABIC films deliver very narrow gauge tolerances. Compared to existing solutions with wider gauge variations, this property helps converters consistently assemble multi-layer cards within the mandated thickness range.

These films are well-suited for various types of printing and embedding of various security features. They can be screen printed or offset printed as well as hot-stamped (hologram). Other technologies include microprinting, infrared- or UV- sensitive printing, guilloche printing and incorporation of RFID. All ID films 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 other materials.

This one side fine velvet/ one side fine matte film is available in gauges ranging from 30 – 400µm with tight gauge tolerance of +/- 10% on 30µm, +/- 5% from 50µm - 249µm, +/- 2.5% from 250µm - 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 50µm – 440µm with tight gauge tolerance of +/-5% <249µm, and +/- 2.5% from 250µm - 440µm.

LEXAN SD8B94 film

Transparent laser markable polycarbonate film that can be used as the top or intermediate layer to provide grayscale graphics and precise images for high security personalization. This one side fine velvet/ one side fine matte film is available in gauges from 30µm – 150µm with maximum gauge tolerance of +/- 10% on 30µm, +/- 5% from 50µm - 150µm

LEXAN SD8A12 film

Clear polycarbonate film for overlay or intermediate layers. This one side high gloss polished / one side fine matte film is available in gauges of 50 and 100 µm with tight gauge tolerance of +/- 5%.

LEXAN SDCX co-extruded film

Combines a core layer of white opaque or transparent Lexan film with a clear, laser-engravable cap layer to avoid the challenges of handling separate thin film layers, offering easy processing. Standard available in 150µm total thickness (including 50µm cap-layer). Customer gauges upon request.

LEXAN SC hard-coated overlay films

Surpasses standard PC film in durability, including scratch and chemical resistance, helping to extend useful life of the card. Available in thicknesses of 105 µm. LEXAN SC8A12E film is a clear hard coated and LEXAN SC8A92E film is a clear laserable hard coated overlay film.

Availability

Clear Overlays LEXAN™ SD8B14 Film	Gauge	Length	Weight
2 sides textured	µm	m	kg
Texture: fine velvet / matte Width :1220 mm Color: 112 (transparent) MOQ: 1 pallet	30	1940	85
	50	1940	142
	75	1290	142
	100	970	142
	125	640	117
	150	640	140
	175	457	117
	200	400	117
	250	327	120
	300	320	140
	375	228	125
	400	228	133
White Core Layer LEXAN SD8B24 Film	Gauge	Length	Weight
2 sides textured	µm	m	kg
Texture: fine velvet / matte Width :1220 mm Color: WH9B246 (opaque white) MOQ: 1 pallet	50	1940	158
	70	1300	149
	75	1290	158
	100	970	158
	105	900	154
	110	875	157
	125	640	131
	150	640	156
	175	457	131
	200	400	131
	220	400	144
	240	327	128
	250	327	133
	270	750	331
	280	305	140
	300	320	157
	330	680	367
340	300	167	
385	228	144	
400	228	149	
440	210	135	

Clear, laser-markable layer LEXAN SD8B94 Film	Gauge	Length	Weight
2 sides textured	µm	m	kg
Texture: fine velvet / matte Width: 1220 mm Color: NA9D070T (clear laser mark able) MOQ: 1 pallet	30	1940	85
	50	1940	142
	75	1290	142
	100	970	142
	125	640	117
	150	640	140
Clear overlays LEXAN SD8A12 Film	Gauge	Length	Weight
1 side textured	µm	m	kg
Texture: polish/matte Width: 1220 mm Color: 112 MOQ: 1 pallet	50	1940	142
	100	970	142
Co-extruded Layers LEXAN SDCX Film	Gauge	Length	Weight
2 sides textured	µm	m	kg
Texture: fine matte / fine matte Width: 1220 mm Color: WH9B246 MOQ: 1 pallet	150	640	149
Flexible Coated Overlays LEXAN SC8A12E Film	Gauge	Length	Weight
hard-coated clear	µm	m	kg
Texture: polished / fine matte Width: 1220 mm Color: 112 MOQ: 1 pallet	105	838	129
Flexible Coated Overlays LEXAN SC8A92E Film	Gauge	Length	Weight
hard coated clear laserable	µm	m	kg
Texture: polished / fine matte Width: 1220 mm Color: NA9D070T MOQ: 1 pallet	105	838	129

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