CHEMISTRY THAT MATTERS<sup>™</sup>



# SECURITY+ PERFORMANCE

LEXAN<sup>™</sup> SD POLYCARBONATE FILM MATERIALS FOR SECURITY DOCUMENTS



# ABOUT SABIC

SABIC operates a worldwide network of sales, distribution, research, manufacturing and technical service facilities. With all twelve ISO certified manufacturing sites for thermoplastics films and sheets across the USA, Canada, the Netherlands, Italy, Austria, China, Malaysia, India and Brazil, the company serves customers around the world in a broad spectrum of industries and applications. The company also offers a local team, complete supply chain and distribution organization to ensure a reliable source of materials to its customers wherever their manufacturing site is located.

## 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

With a decade of proven experience, SABIC offers a highperformance polycarbonate (PC) LEXAN<sup>™</sup> 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 overlay 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. Additional to the standard layers, SABIC also offers LEXAN<sup>™</sup> SDCX co-extruded film and LEXAN<sup>™</sup> SC8A12E/SC8A92E flexible hardcoated films. These 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
- High contrast 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

### 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  $30 - 400\mu$ m with tight gauge tolerance of +/- 10% on  $30\mu$ m, +/- 5% from  $50\mu$ m -  $249\mu$ m, +/- 2.5% from  $250\mu$ m -  $400\mu$ m.

### 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 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  $50\mu m 440\mu m$  with tight gauge tolerance of  $+/-5\% < 249\mu m$ , and +/- 2.5% from  $250\mu m - 620\mu m$ .

### 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 um with tight gauge tolerance of +/-5%.

### 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 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 75 and 105  $\mu$ m. LEXAN SC8A12E film is a clear hard coated and LEXAN SC8A92E film is a clear laserable hard coated overlay film.

### LEXAN SD14UV FILM

Transparent UV-lasermarkable polycarbonate overlay film that allows card manufacturers to introduce new security elements into the card during personalization. This one side fine velvet/one side fine matte film is available in gauges of  $50\mu$ m and  $100\mu$ m with tight gauge tolerance of  $\pm$  5%.



# **AVAILABILITY**

Clear Overlays LEXAN™ SD8B14 Film	Gauge	Length	Weight
2 sides textured	μm	m	kg
Texture:	30	1940	85
fine velvet / fine matte Width :1220 mm	50	1940	142
Color: 112 (transparent)	75	1290	142
MOQ: 1 pallet	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

LEXAN SD8B24 Film	Gauge	Length	Weight
2 sides textured	μm	m	kg
Texture: fine velvet / fine matte Width :1220 mm Color: WH9B246	50	1940	158
	75	1290	158
	100	970	158
(opaque white) MOQ: 1 pallet	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
	280	305	140
	300	320	157
	340	270	150
	385	228	144
	400	228	149
	440	210	135
	620	140	142

### Clear, laser-markable layer

LEXAN SD8B94 Film	Gauge	Length	Weight
2 sides textured	μm	m	kg
Texture:	30	1940	85
fine velvet / fine matte Width: 1220 mm	50	1940	142
Color: NA9D070T	75	1290	142
(clear laser mark able) MOQ: 1 pallet	100	970	142
MOQ. I pallet	125	640	117
	150	640	140

### Clear overlays

LEXAN SD8A12 Film	Gauge	Length	Weight
1 side textured	μm	m	kg
Texture: polish/fine matte	50	1940	142
Width: 1220 mm Color: 112	100	970	142
MOQ: 1 pallet			

### 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	75	838	92
Width: 1220 mm Color: 112	105	838	129
MOQ: 1 pallet			

### Flexible Coated Overlays LEXAN SC8A92E Film

LEXAN SC8A92E Film	Gauge	Length	Weight
hard coated clear laserable	μm	m	kg
Texture: polished / fine matte	75	838	92
Width: 1220 mm Color: NA9D070T	105	838	129
MOQ: 1 pallet			

### Flexible Coated Overlays

LEXAN SD14UV FILM	Gauge	Length	Weight
hard coated clear laserable	μm	m	kg
Texture: fine velvet / matte	50	1940	142
Width: 1220 mm Color: 112	100	970	142
MOQ: 1 pallet			

### CONTACT US

### Middle East and Africa

SABIC Global Headquarters PO Box 5101 Riyadh 11422 Saudi Arabia T +966 (0) 1 225 8000 F +966 (0) 1 225 9000 E info@sabic.com

### Americas

SABIC 1 Plastics Avenue Pittsfield, MA 01201 USA T 800 323 3783 (toll free) T +1 413 448-6655 F (888) 443 2033 E sales.spinside@sabic.com

### Europe

SABIC Plasticslaan 1 4612 PX Bergen op Zoom The Netherlands T +31 (0)164 293678 F +31 (0)164 293272 E sfs.info@sabic.com

### Asia Pacific

SABIC 2550 Xiupu Road Pudong 201319 Shanghai China T +86 21 3222 4500 F +86 21 6289 8998 E sfs.info@sabic.com

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. ENCLORE NO USE OF ITS 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. ENCLORE OR ANY LOSS RESULTING THE USE'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS MESSIBLE FOR ANY LOSS DET IS 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, product, 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.

SABIC and brands marked with ™ are trademarks of SABIC or its subsidiaries or affiliates. © 2016 SABIC. All Rights Reserved.