## **Polycarbonate Security & Identity Cards**

Identity cards and security cards are growing in use and sophistication for a variety of applications: drivers licenses, employee ID, healthcare, residency and many other uses. Because of the need for greater security in these identity credentials, and because of the cost of the security features implimented in the card, a longer lasting, more durable card is needed.

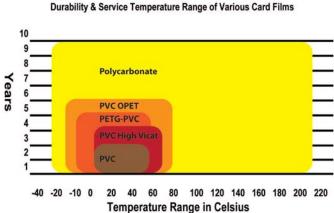
These cards must stand up to many types of stress. They must hold up to attempts at physical alterations, years of "poor handling" by some inconsiderate users, and even weather conditions. Card manufacturers need to deliver the most secure, durable, and climate resistant cards. The substrate of choice that more and more manufactureres are turning to is polycarbonate.

Polycarbonate films have many positive attributes that are essential for this type of card application. It has high temperature resistance, great surface textures for printing, tight gauge tolerance, low shrinkage, and special colors. These features allows polycarbonate to far surpass other materials, such as PVC, in the three most needed qualities of a secure card: durability, life expectancy, and environmental stability. To meet the unique needs of this market, SABIC Innovative Plastics has introduced a new film, Lexan® SD (Security Documents).

The Lexan® SD film product group has all 3 primary products that manufacturers need to create cards. The films are the SD8B14, SD8B24 and SD8B94.

Lexan® SD8B14 film is a clear polycarbonate that is used as the overlay layer. The texture for the film is fine velvet one side and fine matte the other side. The SD8B14 is made from 2 mils to 16 mils gauge.

Lexan® SD8B24 is an opaque white polycarbonate film. The white color is designed to hide embedded security devices. This film has a fine velvet / fine matte texture. This film is available from 3 mils to 25 mils.



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Lexan® SD8B94 is perhaps the most unique film in that it is laser markable to assist in making the card counterfeit resistant. The texture is also fine velvet/fine matte. This transparent film is available in 2 mils to 6 mils gauges.

All three of these films are made in 48" wide master rolls. The films are produced in a clean room environment in Europe, but with stocking availability in the U.S. Tekra has an extensive set of samples of the new Lexan® SD films and we encourage customers who manufacture identity and security cards to ask their Tekra Sales Rep for an 8"x10" sample of the film and gauge of your preference.

