

## **PRELAM LITE PRODUCT LINE** **(BUFFERED POLYESTER)**

### **DEFINITION**

Prelam Lite is a patented prelaminated product manufactured by CompoSecure, LLC, Mountainside, NJ, USA, that utilizes Rocheux International's Tairilin® polyester material. This product extends the standard life of a plastic card from three years to seven years. Prelam Lite is a buffered polyester that enhances the bond between Polyester and PVC. This results in a card which withstands even severe service testing. Unbuffered polyesters do not withstand this level of service testing and remain intact. Prelam Lite costs less due to the lower content of polyester materials. Since the strongest part of the structure is at the outer surface (similar to an I Beam), maximum benefit for card life and strength is achieved.

### **AVAILABLE PRELAM LITE PRODUCTS**

This clear PET composite material is available in sheet or roll form. This replaces laminating film and runs on standard card manufacturing equipment. It is offered in the following configurations:

<b><u>Product Code</u></b>	<b><u>Thickness</u></b>
PL3CL:	.003"
PL3WL:	.003"
PL5CL:	.005"
PL5WL:	.005"
PL6CL:	.006"
PL6WL:	.006"

### **PRODUCT NOTE**

Product codes ending with "C" denote clear Prelam materials. Product codes ending with "W" denote translucent white materials (white buffer one side). White Prelams are generally used for 2D barcode applications, and as a replacement for projects that currently use white polyester products. Z Axis failure normally seen in cards manufactured with white PET is eliminated with the used of white Prelam. Please note that special attention must be paid to the opacity of the white PVC center core to ensure ISO compliance, due to white Prelam's translucency. White Prelams are suitable for all printing applications.

## **PERFORMANCE CHARACTERISTICS**

- One sheet of PL3 “Lite” laminated on either side of a solid PVC core (2 sheets of PL3 “Lite”) yields a 5 year card life (10% polyester content).
- One sheet of PL5 “Lite” laminated on either side of a solid PVC core (2 sheets of PL5 “Lite”) yields a 7 year card life (20% polyester content).
- One sheet of PL6 “Lite” laminated on either side of a solid PVC core (2 sheets of PL6 “Lite”) yields a 9 year card life (27% polyester content).

## **APPLICATIONS**

Prelam Lite should be used in any plastic card application where durability is a concern. Identification cards like Driver’s Licenses and National ID Cards are a natural fit for this product. Special Issue Financial cards are also an ideal application for Prelam products.

## **ECONOMICS/PRICING**

The purchase price of Prelam Lite may be comparable to other available polyester materials, but there are substantial savings in the manufacturing process when using Prelam Lite. Rather than adding thicker polyester to a sheet buildup with multiple layers, Prelam Lite allows you to minimize the number of layers and increase the amount of lower cost material, PVC.

Minimum order size is 1000 sheets, or 1000 linear feet (roll form). Volume pricing for annual contracts is available upon request.

## **SCIENTIFIC DATA**

An independent technical laboratory’s tests have yielded the following results with cards produced using one sheet of Prelam Lite (PL3CL) laminated on either side of a solid PVC core:

- Flex testing showed no fracturing along the A or B Axis until an average of 75,000 flexes.
- Passed the Falling Dart Impact Resistance test.
- Passed the Card Structure Integrity Test. This included humidity, corner impact and shaker tests.

## **OTHER INFORMATION**

- Prelam Lite products are **NOT** meant for use with card designs that include inks that bleed off the edge of the card.
- Standard Prelam Products are also available in .005” and .006” thicknesses, with an eight and ten year life span respectively.
- PL3CL is a great choice for RFID applications; it adds the durability of PET when used as the outside skins of the card structure, thus adding longevity to cards containing costly RFID modules.
- With use of these Prelam products, plastic card manufacturers can include embedded security features such as holograms, OVDs and holographic stripes.