

## Laminating Film for Protecting Digitally Printed Image LCA001T

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### Description:

LCA001T is a high gloss polyester film 36 $\mu$  for over lamination and protection of photographic images. It provides protection from damaging from UV radiation, scratch and abrasion. It has a high resistance to solvent, dirt, acid rain and graffiti can be easily removed with the help of common solvents: acetone, methanol, ammonium ,etc.

### Advantage:

- Protecting from UV rays, scratch and abrasion
- Outdoor Durability : 3years
- Good resistance to UV radiation and outdoor exposure conditions.
- Available Width : 137cm (54")
- High clarity
- Allows easy removal of graffiti : Good resistance to chemicals and solvents.
- Used on images created by screen-printing or digitally printed images.
- Excellent dimensional stability.

### Areas of use:

- Protection of vehicle graphics (not curved area)
- Indoor and outdoor protection of printed digital image

### Characteristics:

Item	Description
Film	36 $\mu$ m PET Film
Thickness	60 $\mu$ m with adhesive ( $\pm 10\%$ )
Adhesive	Acrylic based pressure sensitive (Solvent based)
Adhesive color	Clear
Liner	Silicone treated PET coated paper(36 $\mu$ m)
Application surfaces	Flat
Application temp.	$\geq 10^{\circ}\text{C}$ (18 to 25 $^{\circ}\text{C}$ optimum)

### Durability:

Durability is based on field experience and exposure tests in South Korea. Outdoor durability is 3 years when properly processed and applied (unprinted film vertical exposure)

- \* Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased.
- \* Accelerated: 1200hr minimum  
As determined in an Atlas Weather-o-meter conforming to ASTM G-26-77, section4, using the standard dual cycle of 102minutes of light at 145°F(63 $^{\circ}\text{C}$ ) and 18minutes of water spray at 145°F(63 $^{\circ}\text{C}$ )

### Shelf Life:

Shelf life is 2 year from factory shipment

Storage condition: Free from excessive moisture, temperature, direct sunlight (20 $^{\circ}\text{C}$  x 50% R.H)

**Physical Properties:**

Property	Metric units	Test Method
Thickness (Including adhesive)	60 $\mu$ m $\pm$ 10	Micrometer
Peel adhesion(24hrs)	1,200g/in	180 peeling PSTC-1
Service temp. range	-45 $^{\circ}$ C ~ 82 $^{\circ}$ C	Film applied Al panels 24hrs prior test
Application temp	$\geq$ 10 $^{\circ}$ C	18 to 25 $^{\circ}$ C optimum, on clean substrate
Opacity	Tt >85	Haze Meter (Tt: Transmission)
Gloss	70 $\uparrow$	@60, in Machine Direction
Release liner thickness	0.036mm	Micrometer

**Fabrication**
**Laminating**

: No heat is required. It can be used most squeeze roll laminators. Keep the film flat during lamination.

**Chemical Resistance**

Resistant to water and detergents, Also resistant to most diluted acids and alkalis.

Not affected by short contact with most of aliphatic and aromatic hydrocarbons, ketones, esters, chlorinated hydrocarbons and alcohol.

The film shows no noticeable effects after immersion in the following fluids for the stated time periods. Condition constituting film failure occurs only after an additional extended exposure time

**Maintenance and Cleaning**

The cleaner must be wet, non-abrasive, without strong solvents or alcohol, and have a pH value between 3.0 and 11.0 (neither strongly acidic nor strongly alkaline).

A cloth or soft bristle brush can be used to apply or wipe the cleaner.

Before cleaning , Select an appropriate solvent and test it in an inconspicuous area to ensure it removes the contaminant without damaging the graphic.

**Warranty:**

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