



## ► Series 2100 Cast Film

### Series 2100: Non-Perforated – Series 2200: Perforated

Series 2100 is a 2-mil (50 micron) cast film is extra formable, thereby providing exceptional conformability, even on deep recesses and channel constructions on vans. The advanced adhesive system is designed to perform well on a wide variety of substrates including rigid sign faces, banners, and painted metal. Series 2100 is now available in 83 vibrant colors. With outdoor durability up to 10 years, it withstands adverse climate and environmental conditions.

### APPLICATIONS & FEATURES

- Maintains softness over time.
- Resists embrittlement, cracking and crazing.
- Outperforms most films in multi-layered graphics.
- Black and White - 10 Years; Colors - 8 Years; Metallics - 6 years.
- Conforms exceptionally well to rivets, corrugations and channel structures.
- Film is designed for cut graphics not for digital printing applications.

### PERFORMANCE & PHYSICAL DATA

| PROPERTY                             | TEST METHODS                                                                                                                                | TYPICAL VALUE                            |                      |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------|
| <b>SURFACE FINISH</b>                | Gloss Meter 60° Reflection                                                                                                                  | 70 to 90 Gloss Units                     |                      |
| <b>THICKNESS</b>                     | Micrometer, Federal Bench Type                                                                                                              | 2-mil (50 micron)                        |                      |
| <b>TENSILE STRENGTH</b>              | Tensile Tester 2-in (51 mm) jaw separation; crosshead speed of 12 in/min. (5.1 mm/s)                                                        | ≥ 4.5 lb/in width                        | ≥ 0.8 kg/cm width    |
| <b>ELONGATION</b>                    | Instron Tensile Tester as above                                                                                                             | Non-metallics ≥ 170%<br>Metallics ≥ 100% |                      |
| <b>SHELF LIFE (IN BOX)</b>           | Ideal storage temperature 70°F (21°C) and 50% relative humidity                                                                             | 2 years from factory shipment            |                      |
| <b>APPLICATION TEMPERATURE RANGE</b> | On clean, dry substrate                                                                                                                     | 40°F to 120°F                            | 5°C to 50°C          |
|                                      |                                                                                                                                             | 60°F to 90°F optimum                     | 15°C to 30°C optimum |
| <b>SERVICE TEMPERATURE RANGE</b>     | Film applied to etched aluminum panels 24 hours prior to testing                                                                            | -40°F to 200°F                           | -40°C to 93°C        |
| <b>GASOLINE RESISTANCE</b>           | Film applied to etched aluminum panels 24 hours prior to testing; immersed 15 minutes at 70°F (21°C); stabilized 24 hours before inspection | No appreciable effect                    |                      |

\*NOTE: 007 Silver, 004 Gold and custom Metallics 5 year warranties  
Standard Terms & Conditions Apply

## PERFORMANCE & PHYSICAL DATA (cont'd)

| PROPERTY              | TEST METHODS                 | TYPICAL VALUE  |                |
|-----------------------|------------------------------|----------------|----------------|
| DIMENSIONAL STABILITY | 158°F (70°C), 48 hours       | 0.01 - 0.02 in | 0.25 - 0.50 mm |
| PEEL ADHESION         | PSTC-1, 15 min               | 3.0 lbs/in     | 525 N/m        |
|                       | PSTC-1 Ultimate Bond         | 4.5 lbs/in     | 787 N/m        |
| LINER RELEASE         | TLMI 300 in/min (762 cm/min) | 150 g/2 in     | 30 g/cm        |

## ADHESION/CHEMICAL CHARACTERISTICS

| ADHESION CHARACTERISTICS | ENGLISH UNITS | NOMINAL | CHEMICAL REACTION RESISTANCE |           |
|--------------------------|---------------|---------|------------------------------|-----------|
|                          | Oz / in       | Kg / cm | CHEMICAL AGENTS              | RESULTS   |
| ALUMINUM (ANODIZED)      | 75            | 0.84    | Acid Environment             | No Change |
| STAINLESS STEEL          | 60            | 0.67    | Soap and Water               | No Change |
| ACRYLIC LACQUER          | 70            | 0.78    | Water                        | No Change |
| ACRYLIC ENAMEL           | 70            | 0.78    | Reference Fuel               | No Change |
| CHROME PLATE             | 60            | 0.67    |                              |           |

Standard film adhesion (PSTC-1) 180°F, peel at room temperature at a rate of 12 inches per minute after 24 hours dwell.

## DURABILITY

Series 2100 is a premium cast film. Standard colors have been weather tested in a variety of rigorous direct exposure locales including Florida, Arizona and California. Custom color matches are derived only from best weathering pigments and stabilizer systems, incurring very high durability assurance at short development times.

## OPTIMUM PERFORMANCE AND WARRANTY EXCEPTIONS

Actual weathering durability depends on surface preparation, surface maintenance and exposure conditions. Successful weather resistance is characterized by the retention of legibility.

Series 2100 film will resist weathering best when applied to vertical or upper outboard angles. Horizontal angles such as hood, trunk and auto roof surfaces will weather significantly sooner than vertical and is not recommended. This is due to increased exposure to sun and moisture as well as continued high deposition of dirt and atmospheric contaminants. Arlon does not recommend its Series 2100 film for use on stainless steel trailers or latex painted surfaces.

## OPACITY

High performance vinyl has the greatest hiding power of thin PVC films however, the opacity does vary with color. 67 Primrose Yellow, 99 Bright Purple, 79 Kiwi, 69 Apple Green, 89 Aqua Blue, 70 Palm Oyster Gray, 04 Gold Metallic, 21 Smoke Metallic and 07 Silver Metallic are not compatible with backlit and window applications. (Only Series 2500 is designed and warranted or backlighting.)

Those hues with high but not complete opacity include: 01 Red, 14 Tomato Red, 60 Bright Cardinal Red, 11 Dark Blue, 56 Hot Pink, 76 Magenta, 02 White and 61 Kelly Green. Colors exhibiting low opacity are: 06 Yellow, 67 Primrose Yellow, 69 Apple Green, 79 Kiwi, 83 Bright Orange, 96 Tangerine, 97 Light Orange and 73 Poppy. Additionally, metallics are not compatible with backlit or window applications. **Only Series 2500 vinyls are designed and warranted for backlighting.**

## NOTICE TO PURCHASER




Information is based on tests believed to be reliable, but neither accuracy nor completeness is guaranteed.







## TERMS & CONDITIONS

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