



## ► Series 2100 High Performance Cast Film

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

Series 2100 is a 2-mil (50 micron) high performance cast film with clear permanent adhesive. The material is formulated to be ultra-conformable while having extended durability. Series 2100 is designed with UV inhibitors and heat stabilizers in the formula to protect the film and provide vibrant colors that are long lasting when exposed to sunlight, UV rays and general elements. Extensive weathering tests are completed to ensure the film will perform and maintain performance and color for the warranted life of the product. When maintained and cleaned per Arlon's recommendations the film will provide you with a durable outdoor graphic that will make your brand stand out.

### 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	
SURFACE FINISH	Gloss Meter 60° Reflection	70 to 90 Gloss Units	
THICKNESS	Micrometer, Federal Bench Type	2-mil (50 micron)	
TENSILE STRENGTH	Tensile Tester 2-in (51 mm) jaw separation; crosshead speed of 12 in/min. (5.1 mm/s)	≥ 4.5 lb/in	≥ 0.8 kg/cm
ELONGATION	Instron Tensile Tester as above	Non-Metallics ≥ 170% Metallics ≥ 100%	
SHELF LIFE (IN BOX)	Ideal Storage Temperature 70°F (21°C) and 50% relative humidity	2 years from factory shipment	
APPLICATION TEMPERATURE RANGE	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
SERVICE TEMPERATURE RANGE	Film applied to etched aluminum panels 24 hours prior to testing	-40°F to 200°F	-40°C to 93°C

NOTE: 007 silver, 004 gold and custom metallics have a 5 year warranty.

Standard Terms & Conditions Apply

## PERFORMANCE & PHYSICAL DATA (cont'd)

PROPERTY	TEST METHODS	TYPICAL VALUE	
GASOLINE RESISTANCE	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	
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/in	613 N/m 525
	PSTC-1 Ultimate Bond	4.5/in	875 N/m 787
LINER RELEASE	TLMI 300 in/min (762 cm/min) 2 in (51 mm) wide sample	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) (MIL SPEC M-43719)	75	0.84	Acid Environment (Ford spec ESB-M3G5L-B1.3.4.5)	No Change
STAINLESS STEEL (FORD SPEC. ESB-M3G5L-B1)	60	0.67	Soap and Water (Ford spec 3.4.4)	No Change
ACRYLIC LACQUER (MIL SPEC)	70	0.78	Water (Ford spec 3.4.6)	No Change
ACRYLIC ENAMEL (FORD SPEC)	70	0.78	Reference Fuel (Mil spec M43719-A)	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 for 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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