

# Series 2100 Cast Film

Series 2100: Non-Perforated - Series 2200: Perforated

Series 2100 is a 50 microns 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 67 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
- · Contrasting blue liner on Gloss & Matte White make for optimal cutting & weeding

# **PERFORMANCE & PHYSICAL DATA**

PROPERTY	TEST METHODS	TYPICAL VALUE
SURFACE FINISH	Gloss Meter 60° Reflection	70 to 90 Gloss Units
THICKNESS	Micrometer, Federal Bench Type	50 microns
TENSILE STRENGTH	Tensile Tester 51 mm jaw seperation; crosshead speed of 5.1 mm/s	≥ 0.8 kg/cm width
ELONGATION	Instron Tensile Tester as above	Non-metallics ≥ 170% Metallics ≥ 100%
SHELF LIFE (IN BOX)	Ideal storage temperature 21°C and 50% relative humidity	2 years from factory shipment
APPLICATION TEMPERATURE RANGE	On clean, dry substrate	5°C to 50°C
		15°C to 30°C optimum
SERVICE TEMPERATURE RANGE	Film applied to etched aluminum panels 24 hours prior to testing	-40°C to 93°C
GASOLINE RESISTANCE	Film applied to etched aluminum panels 24 hours prior to testing; immersed 15 minutes at 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

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## PERFORMANCE & PHYSICAL DATA (cont'd)

PROPERTY	TEST METHODS	TYPICAL VALUE
DIMENSIONAL STABILITY	70°C, 48 hours	0.25 - 0.50 mm
PEEL ADHESION	PSTC-1, 15 min	525 N/m
	PSTC-1 Ultimate Bond	787 N/m
LINER RELEASE	TLMI 762 cm/min	30 g/cm

## ADHESION/CHEMICAL CHARACTERISTICS

ADHESION	NOMINAL	CHEMICAL REACTION RESISTANCE	
CHARACTERISTICS	Kg/cm	CHEMICAL AGENTS	RESULTS
ALUMINUM (ANODIZED)	0.84	Acid Environment	No Change
STAINLESS STEEL	0.67	Soap and Water	No Change
ACRYLIC LACQUER	0.78	Water	No Change
ACRYLIC ENAMEL	0.78	Reference Fuel	No Change

Standard film adhesion (PSTC-1) 82°C, peel at room temperature at a rate of 30 cm 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.

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#### **TERMS & CONDITIONS**

The following is made in lieu of all warranties expressed or implied:

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