# **Avery Dennison**® MPI 3900 Value Film Gloss White Short Life Promotional Film Permanent

# **Features**

- · Exceptional value for money for short life promotional graphics
- · Very good printability on eco-solvent, solvent, latex and UV curable printers
- · Good dimensional stability during conversion and application
- · Good outdoor durability and performance for short life graphics
- · Gloss finish for vibrant colours
- Very good low temperature adhesion performance
- Versatile permanent adhesive with excellent adhesion to most substrates and removable with heat and/or chemicals

# **Description**



**Film**: 95 micron gloss white monomeric calendered vinyl



**Adhesive**: Clear permanent acrylic



**Backing**: One side PE coated paper, 140 g/m<sup>2</sup>



Outdoor Durability\*\*: Up to 1 year

# Conversion^

Flat bed cutters	Cold overlaminating
Friction fed cutters	Electrostatic printing
Die cutting	Latex inkjet
Thermal transfer	Eco solvent inkjet
Screen printing	Solvent inkjet
Offset printing	UV curable inkjet

# **Uses**

Avery Dennison® MPI 3900 Value Film Gloss Permanent is a gloss white short life promotional vinyl film designed for use in a wide range of short term promotional digital printed applications where excellent adhesion, good outdoor durability and value for money is required.

# **Common Applications**

- Point of sale graphics
- · Outdoor advertising
- · Exhibition graphics
- · Window graphics
- · Real estate signage
- · Vehicle advertising
- Promotional signage
- · Stickers and labels



<sup>^</sup>Always test with your combination of printer and inks prior to commercial use.

#### Physical characteristics

# General

Caliper, face film	ISO 534	95 micron
Caliper, face film & adhesive	ISO 534	115 micron
Gloss, 20º	DIN 67530	40
Opacity	ISO 2471	95%
Dimensional stability	DIN 30646	0.5 mm max
Tensile strength	ISO 1184	22 Mpa (MD)
		18 Mpa (CD)
Face film elongation	ISO 1184	175% (MD)
		175% (CD)
Adhesion, initial	FINAT FTM-1, stainless steel	390 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	550 N/m
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	1 year
Durability **	Vertical exposure	up to 1 year (unprinted)

# **Thermal**

Application temperature	Minimum: +10°C
Temperature range	- 20℃ to + 80℃

#### Chemical

Resistant to most petroleum based oils, greases and aliphatic solvents Resistant to most mild acids, alkalies, and salts

# Note:

Solvent and Eco solvent digital printed films must be properly dried and cured before further processing, like laminating, varnishing, trimming, contour cutting or application. The residual solvents can otherwise change the products' specific features and properties.

#### Important

Information on physical characteristics is based upon tests we believe to be reliable. The values listed herein are typical values and are not for use in specifications. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of any material for their specific use.

All technical data is subject to change without prior notice.

#### Warranty

Avery® materials are manufactured under careful quality control and are warranted to be free from defect in material and workmanship. Any material shown to our satisfaction to be defective at the time of sale will be replaced without charge. Our aggregate liability to the purchaser shall in no circumstances exceed the cost of the defective materials supplied. No salesman, representative or agent is authorised to give guarantee, warranty, or make any representation contrary to the foregoing.

All Avery® materials are sold subject to the above conditions, being part of our standard conditions of sale, a copy of which is available on request.

#### \*\*Durability

Durability is based on exposure conditions in the Asia Pacific region. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing north in the southern hemisphere or south in the northern hemisphere; in areas of long high temperature exposure such as northern Australia; in industrially polluted areas or high altitudes, exterior performance will be decreased.

- <sup>+</sup>Compatible with most media and ink combinations. Test prior to use.
- \*\*\*Information unavailable at time of printing.

# **Test Methods**

#### Dimensional stability:

Is measured on a 150 x 150 mm aluminium panel to which a specimen has been applied; 72 hours after application the panel is exposed for 48 hours to + 70  $^{\circ}$ C, after which the shrinkage is measured.

#### Adhesion:

(FTM-1, FINAT) is measured by peeling a specimen at a 180° angle from a stainless steel or float glass panel, 24 hours after the specimen has been applied under standardised conditions. Initial adhesion is measured 20 minutes after application of the specimen.

# Flammability:

A specimen applied to aluminium is subjected to the flame of a gas burner for 15 seconds. The film should stop burning within 15 seconds after removal from the flame.

#### Temperature range:

A specimen applied to stainless steel is exposed at high and low temperatures and brought back to room temperature. I hour after exposure the specimen is examined for any deterioration. Note: Prolonged exposure to high and low temperatures in the presence of chemicals such as solvents, acids, dyes, etc. may eventually cause deterioration.

#### Chemical Resistance:

All chemical tests are conducted with test panels to which a specimen has been applied. 72 hours after application the panels are immersed in the test fluid for the given test period. 1 hour after removing the panel from the fluid, the specimen is examined for any deterioration.

#### Corrosion Resistance:

A specimen applied to aluminium is exposed to saline mist (5% salt) at 35°C. After exposure, the film is removed and the panel is examined for traces of corrosion.

