Avery Dennison® MPI 1900 AP (A-Polar)

Gloss White Cast Vinyl Permanent

Features

- Excellent printability and handling on selected printing technologies
- 2 side PE coated liner for exceptional lay flat performance during conversion
- Outstanding outdoor durability and performance
- Very good conformability to irregular surfaces
- Excellent dimensional stability after installation
- High gloss finish for superior appearance
- Suitable for application onto LDPE, HDPE, PP, PE and PU substrates
- ICS Performance Guarantee

Description

Film: 50 micron gloss white cast vinyl

Adhesive: Permanent , grey acrylic. Designed for low surface energy surfaces

Backing: Two side PE coated kraft paper, 140g/m^2

Outdoor life: Up to 7 years unprinted

Application surface: Flat, simple curves, rivets, compound curves and corrugations

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**

+Always test with your combination of printer and inks prior to commercial use.

Common Applications

- Flat sided trucks
- Cars and vans
- Trains and light rail
- Buses
- Window graphics
- Architectural signage
- Marine
- Outdoor advertising

Uses

Avery Dennison MPI 1900 AP is a premium cast vinyl film designed for use low surface energy substrates such as LDPE, HDPE, PP, PE and PU.

Physical characteristics

General

Calliper, face film	ISO 534	50 micron
Calliper, face film & adhesive	ISO 534	80 micron
Dimensional stability	DIN 30646	0.4 mm max
Elongation	DIN 53455	> 100%
Adhesion, initial	LDPE,HDPE,PP, PU, ABS, Aluminium	300 N/m
Adhesion, ultimate	LDPE,HDPE,PP, PU, ABS, Aluminium	350 N/m
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Durability **	Vertical exposure ^	Up to 7 years unprinted

^ See ICS Performance Guarantee Durability Bulletin for your specific printer and ink combination for further information

Thermal

Application temperature	Minimum: + 10°C
Temperature range	- 40°C to + 80°C

Chemical

Resistant to most petroleum based oils, greases and aliphatic solvents

Resistant to most mild acids, alkalies and salts

Note:

Materials have to 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 Dennison® 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 Dennison® 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 normal middle European and central North American regions. 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. Please refer to Avery Dennison Instructional Bulletin 1.3 for definitions and reductions based on the 'Zone System'.

+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°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. 1 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.