

# Avery Dennison®

## MPI™ 1104 / MPI™ 1104 Easy Apply

### Gloss White Cast Vinyl

#### Features

- Excellent printability and handling on all major printing platforms
- Easy Apply or StaFlat liner options
- Outstanding outdoor durability and performance
- Superior 3D conformability\* for demanding corrugations
- Repositionable adhesive for easier positioning during application
- Easy Apply has air egress feature to avoid air entrapment and wrinkles during application
- High gloss finish
- ICS Performance Guarantee

\* when used in combination with DOL 1400 cast overlaminates

#### Conversion\*

- |   |   |
|---|---|
| <input type="checkbox"/> Flat bed cutters     | <input type="checkbox"/> Cold overlaminating                  |
| <input type="checkbox"/> Friction fed cutters | <input type="checkbox"/> Electrostatic printing               |
| <input type="checkbox"/> Die cutting          | <input checked="" type="checkbox"/> <b>Latex inkjet</b>       |
| <input type="checkbox"/> Thermal transfer     | <input checked="" type="checkbox"/> <b>Eco solvent inkjet</b> |
| <input type="checkbox"/> Screen printing      | <input checked="" type="checkbox"/> <b>Solvent inkjet</b>     |
| <input type="checkbox"/> Offset printing      | <input checked="" type="checkbox"/> <b>UV curable inkjet</b>  |

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

#### Uses

Avery Dennison MPI 1104 Cast film is a premium cast vinyl designed for use in a wide range of architectural, transportation and general signage applications where, conformability, durability and superior outdoor performance is required. Exceptional print performance with Latex, UV, Eco-Solvent and hard solvent inks.

To enhance colour and to protect images against UV radiation and abrasion, Avery Dennison MPI 1104 Cast films are recommended to be protected using an overlaminate. If the final graphic is used on corrugated vehicles or substrates, Avery Dennison DOL 1460 Gloss or Avery Dennison DOL 1480 Matt conformable laminates are recommended to protect the graphic and enhance its life span.

#### Description



**Film:** 50 micron gloss white cast vinyl



**Adhesive:** Repositionable permanent, grey tie coat, acrylic based



**Backing:**  
MPI 1104 - Staflat liner  
MPI 1104 EA - Easy Apply liner



**Outdoor life:** Up to 7 years unprinted

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

#### Common Applications

- Full vehicle wraps
- Interior & exterior architectural applications
- Trains and light rail
- Buses
- All permanent applications requiring high conformability
- Outdoor advertising

## Physical characteristics

### General

Calliper, face film	ISO 534	50 micron
Calliper, face film & adhesive	ISO 534	80 micron
Dimensional stability	DIN 30646	0.3 mm max
Elongation	DIN 53455	> 100%
Adhesion, initial	FINAT FTM 1, stainless steel MPI 1104	450 N/m
Adhesion, ultimate	MPI 1104EA	300N/m
	FINAT FTM 1, stainless steel MPI 1104	600 N/m
Flammability	MPI 1104EA	400 N/m
		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: $\geq +10^{\circ}\text{C}$
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 before further processing, like laminating, varnishing or application. The residual solvents can otherwise change the products' specific features.

For good print and converting result we recommend to let the rolls acclimatize in the print/lamination room at least 24 hours before printing or converting. Too much temperature or humidity deviation between material and room climate can cause layflatness and/or printability issues. Generally, constant material storage conditions of ideally 20°C (+/-2°C) /50% rh (+/- 5%), without too big climate deviations, will support a more robust and stable printing/converting process. For further details, please refer to TB 1.11.

### 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.

### 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.