Graphics Solutions Product Data Sheet

# Avery Dennison® DOL 2100 Matte

# Matte Clear Polymeric Calendered Overlaminate

## Features:

- Excellent UV protection
- Provides finished graphic ICS Warranted performance of 4 years
- Good abrasion resistance
- Excellent adhesion to printed and unprinted graphic materials
- Excellent transparency
- · Matte finish for low-glare applications

## Conversion

$\bigcirc$	Flatbed cutters	•	Cold overlaminating
$\bigcirc$	Friction fed cutters	$\bigcirc$	Electrostatic printing
$\bigcirc$	Die cutting	$\bigcirc$	Latex inkjet
$\bigcirc$	Thermal transfer	$\bigcirc$	Eco solvent inkjet
$\bigcirc$	Screen printing	$\bigcirc$	Solvent inkjet
$\bigcirc$	Offset printing	$\bigcirc$	UV curable inkjet

# **Description:**



**Film:** 80 micron matte clear UV stable polymeric calendered PVC



Adhesive: Permanent acrylic



**Liner:** One side coated 135gsm Kraft paper



Outdoor life\*\*: Up to 7 years

**Application surface:** Flat, simple curves

## **Standards**

AS/NZS 4586-2013 slip resistance classification of new pedestrian surfaces: Appendix A, B, Dual Classifications: P1, D1

In order to interpret the classifications, please refer to Standards Australia Handbook SA HB 198:2014 'Guide to the specification and testing of slip resistance of pedestrian surfaces' which recommends minimum classifications for a wide variety of locations.

## **Application**

For processing tips and reference guides please refer to Avery Dennison Instructional Bulletins:

- 1.18 Application and Maintenance of Avery Dennison® Floor Graphics
- 4.06 Processing Tips for Laminating Films (DOL)

#### Uses

Avery Dennison DOL 2100 is a flexible high quality UV stable matt polymeric calendered overlaminate designed for use as a protective overlaminating film for digitally printed images and is suitable for medium life outdoor images on flat or simple curved surfaces.

# **Common Applications:**

- Flat sided trucks
- Outdoor Advertising
- Indoor Advertising
- Windows
- Floor Graphics
- Marine vessels
- Corporate Signage



# General

Calliper, face film	ISO 534	80 micron
Calliper, face film & adhesive	ISO 534	110 micron
Gloss	ISO 2813, 20°	75%
Dimensional stability	DIN 30646	0.3 mm max
Adhesion, 15 mins	ASTM 1000, Stainless steel	500 N/m
Adhesion, 24 hrs	ASTM 1000, Stainless steel	700 N/m
Flammability	AS/NZS 3837:1998	Group 1
	ISO 5660-1:2002	Group 1-s
Slip Resistance	AS/NZS 4586:2013	Classification
	Appendix A	P1
	Appendix B	D1
	Appendix AB Dual	P1, D1
Shelf life	Stored at 22° C/50-55 % RH	2 years
Expected Durability **	Vertical exposure ^	Up to 7 years

^ 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		
Humidity resistance	120 hours exposure	No effect
Corrosion resistance	120 hours exposure	No contribution to corrosion
Water resistance	48 hour immersion	No effect
Chemical resistance	Mild acids	No effect
	Mild alkalis	No effect
Solvent resistance	Applied to aluminium	No effect exposed to: Oils, greases, aliphatic solvents, motor oils, heptanes, kerosene, JP-4 fuel

#### 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.

#### Warrantv

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.

#### \*\*Expected Durability

The expected durability of Avery Dennison films are defined as the expected performance life of the Avery Dennison graphic film(s) within Zone 1 of the Avery Dennison zone system, in outdoor vertical exposure conditions.

The actual performance life will depend on a variety of factors, including selection and preparation of substrate, angle and direction of exposure, application methods, environmental conditions and cleaning/maintenance of the films.

In case of films used in areas of high temperatures or humidity, high altitudes and industrially polluted areas the performance will be further reduced.

# Expected Durability and Warranted Period Definitions

Expected durability is the expected period of time defined in the product data sheet, the product should, but is not warranted to, perform satisfactorily when applied in vertical exposure conditions as defined in Instructional Bulletin 1.30. The warranted period as defined in the appropriate ICS Performance Guarantee Bulletin, is the maximum period of time Avery Dennison will warrant the finished products performance in accordance with ICS Performance Guarantee Terms and Conditions 1.0, provided that the film is properly stored, converted and installed in accordance with Avery Dennison guidelines.

# **Testing 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 +  $70^{\circ}\text{C}$ , 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.

