# **Avery Dennison**® DOL 4000 Crystal Clear Gloss Optically Clear Cast Overlaminate

## **Features**

- Excellent conformability when used with perforated window films on curved windows
- · Exceptional crystal clear transparency
- Offers maximum UV protection to digitally printed images
- · Improves solvent inkjet outdoor image durability up to 2 years
- · Good abrasion resistance
- · Premium quality, highly conformable high gloss cast vinyl
- · Excellent adhesion to digitally printed images

# **Description**



**Film**: 50 micron gloss clear UV stable highly transparent cast vinyl overlaminate



Adhesive: Permanent acrylic



**Backing**: 75 micron, siliconised polyester (PET)



Outdoor life: Up to 3 years

# Conversion\*

Flat bed cutters	Cold overlaminating
Friction fed cutters	Estat printing
Die cutting	Water based inkjet
Thermal transfer	Solvent inkjet
Screen printing	UV Cured inkjet

# Uses

Avery Dennison DOL 4000 Crystal Clear is a premium quality, flexible, Crystal Clear cast vinyl film designed for use as a protective overlaminating film for digitally printed images, especially for Perforated Window Films.

# **Common Applications**

- With perforated window film
- Cars and vans
- · Window graphics





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

## Physical characteristics

# General

Caliper, facefilm	ISO 534	50 micron
Caliper, facefilm & adhesive	ISO 534	80 micron
Dimensional stability	DIN 38464	0.2mm max
Gloss	ISO 2813, 20º	70%
Adhesion, initial	ASTM 1000, stainless steel	525 N/m
Adhesion, ultimate	ASTM 1000, stainless steel	700 N/m
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Durability **	Vertical exposure	Up to 3 years

## **Thermal**

Lamination temperature	See relevant technical bulletins
Service temperature range	- 40°C to + 80°C

## Chemical

Resistant to most petroleum based oils, greases, and aliphatic solvents

Resistant to mild acids, alkalis and salts

Prolonged immersion in gasoline and similar fluids is not recommended.

# **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) or ASTM 1000 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 printer and ink combinations. Test prior to use.

\*\*\*Information unavailable at time of printing.

## 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.

