# Avery Dennison® DOL 4100 Ultra Clear

# Super Gloss Transparent Polyester Overlaminate

# **Features**

- Excellent optical clarity
- High abrasion resistance
- · Excellent dimensional stability
- · Good resistance to chemicals and solvents
- · Excellent adhesion to digitally printed images
- · Excellent resistance to automatic washing cycles
- · Ideal for overlaminating perforated window films on flat surfaces

# **Description**



**Film**: 25 micron super gloss transparent polyester (PET)



**Adhesive**: Permanent acrylic (Clear)



**Backing**: Transparent polyester (PET) film



Outdoor life: Up to 2 years

# 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

# **Common Applications**

- With perforated window film
- Cars and vans with flat windows
- Window graphics

# Application

When laminating over printed images, the used inks/toners should be thoroughly dry and free of (silicone) additives that might reduce/prevent proper adhesion of the overlaminate. Avery Dennison DOL 4100 is compatible with both screen printed and digitally printed images. Avery Dennison DOL 4100 is only recommended for 100% flat windows. Avery Dennison DOL 4000 can be used for either flat or slightly curved windows.

# Uses

Avery Dennison DOL 4100 is a premium quality UV stable high gloss polyester overlaminate designed for use as a protective overlaminating film for digitally printed images. Avery Dennison DOL 4100 has exceptional optical clarity, abrasion and solvent resistance and is designed especially for overlaminating perforated window films on flat surfaces.



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

### Physical characteristics

### General

Caliper, facefilm	ISO 534	25 micron
Caliper, facefilm & adhesive	ISO 534	50 micron
Dimensional stability	DIN 38464	0.2mm max
Gloss	ISO 2813, 20°	70%
Adhesion, initial	ASTM 1000, stainless steel	***
Adhesion, ultimate	ASTM 1000, stainless steel	***
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Durability **	Vertical exposure	Up to 2 years

# **Thermal**

Lamination temperature	See relevant technical bulletins
Service temperature range	- 40°C to + 125°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.

#### 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

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

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.

# **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.

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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

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.



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