

Avery Dennison® DOL 4000 Crystal Clear

Gloss Optically Clear Cast Overlamine

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*

- | | |
|---|--|
| <input type="checkbox"/> Flat bed cutters | <input checked="" type="checkbox"/> Cold overlaminating |
| <input type="checkbox"/> Friction fed cutters | <input type="checkbox"/> Estat printing |
| <input type="checkbox"/> Die cutting | <input type="checkbox"/> Water based inkjet |
| <input type="checkbox"/> Thermal transfer | <input type="checkbox"/> Solvent inkjet |
| <input type="checkbox"/> Screen printing | <input type="checkbox"/> UV Cured inkjet |

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

Note: It is recommended that before overlaminating graphics printed with Solvent and Eco solvent inks, the inks be cured for 5 days before applying DOL 4000 overlaminate. Failing to do so could compromise the performance of the product.

Uses

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

Common Applications

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

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, 20° | 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.

****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.

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.