

Avery Dennison[®] 440 Gloss Transparent

Gloss Clear Promotional Vinyl

Features

- Gloss clear film for a wide variety of short term screen printed graphics
- Very good printability and handling on screen presses
- Gloss finish for superior appearance and vibrant colours
- Good dimensional stability after application
- Good outdoor durability and performance
- Excellent conversion and application characteristics
- Available with PE liner for exceptional layflat and multi-colour registration
- A broad range of adhesive options to suit any application:
 - Versatile permanent adhesive suitable for most substrates
 - Removable up to 1 year with little or no adhesive residue using heat and/or chemicals
 - Ultra removable with very low tack for easily installed and removed large window graphics

Conversion[^]

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

[^]Always test with your combination of printer and inks prior to commercial use.

Uses

Avery Dennison 440 is a gloss clear promotional vinyl film designed for use in a wide range of short term promotional screen printed graphics applications, where excellent adhesion, good outdoor durability and value for money is required.

Description



Film: 90 micron gloss clear monomeric calendered vinyl



Adhesive: Clear permanent, Removable, Ultra Removable (New) acrylic



Backing:
Kraft: One side coated kraft paper, 128g/m²
PE: Two-side PE coated StaFlat kraft, 145 g/m²



Outdoor life^{}:** Up to 2 years (unprinted)

Common Applications

- Short term outdoor advertising
- Indoor advertising
- Billboard advertising
- Vehicle advertising
- Part labelling
- Label and stickers
- Point of sale promotions
- Window advertising and decorations

Physical characteristics

General

Calliper, face film	ISO 534	90 micron
Grammage, facefilm	ISO 536	114 g/m ²
Calliper, face film & Adhesive	ISO 534	115 micron
Caliper, backing paper (Kraft)	ISO 534	132 micron
Grammage, backing paper (Kraft)	ISO 536	128 g/m ²
Grammage, backing paper (PE)	ISO 536	145 g/m ²
Gloss	ISO 2813, 20°	70 %
Dimensional stability	DIN 30646	0.5 mm max

Permanent

Tack	FINAT FTM-9, glass	>320 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	>800 N/m

Removable

Tack	FINAT FTM-9, glass	>200 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	>200 N/m

Ultra Removable

Tack	FINAT FTM-9, glass	>120 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	>180 N/m

Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Durability **	Vertical exposure	up to 2 year (unprinted)

Thermal

Application temperature		Minimum: + 5°C (Removable +10°C) - 40°C to + 80°C
Temperature range		(Removable -20°C to + 100°C)

Chemical

Humidity resistance	200 hours exposure	No effect
Saltspray resistance	120 hours exposure	No effect
Water resistance	48 hours immersion time	No effect
Solvent Resistance	Applied to aluminium: Applied to aluminium and immersed in: oils Greases, aliphatic solvents, motor oils, heptane, JP-4 fuel	No effect No effect

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.

**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.

^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.