

Avery Dennison® 180 Solid Foil

Matt Solid Foil Permanent

Features

- Topcoated with vinyl primer for excellent ink key
- Suitable for inscription by pen or typewriter (or similar printer)
- High strength perm adhesive
- Excellent sheet stability and layflatness for close register printing
- Excellent printability, conversion and application characteristics
- Excellent dimensional stability & heat resistance
- Good water and weather resistance
- Attractive metallic appearance

Conversion[^]

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

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

*May be printed by offset and letterpress using specific inks and procedures.

Consult your ink supplier for details and ink recommendations.

Uses

Avery Dennison® 180 Solid Foil is suitable for a wide range of functional nameplates, decorative emblems and asset decals, where close registration and value for money are required. Recommended for flat smooth surfaces only.

Description



Film: 50 micron matt silver pure aluminium foil



Adhesive: Permanent acrylic



Backing: One side coated, 135 microns, kraft paper liner



Outdoor life: up to 2 years (unprinted)

Common Applications

- Plain & embossed nameplates, tags
- Logos and decorative emblems
- Machinery plates
- Heat exposure applications
- Electrical equipment & asset labels
- Periodical testing notification

Physical characteristics

General

Caliper, facefilm	ISO 534	50 micron
Caliper, facefilm & adhesive		***
Dimensional stability	DIN 30646	0.1mm max
Gloss		***
Adhesion, initial	FINAT FTM-1, stainless steel	600 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	800 N/m
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Durability **	Vertical exposure	up to 2 years (unprinted)

Thermal

Application temperature	Minimum: + 10°C
Service temperature range	- 40°C to + 150°C

Chemical

Resistant to most petroleum based oils, greases and aliphatic solvents

Resistant to most mild acids, alkalies, and salts

Resistant to humidity and water

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.

**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'.

***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.



Graphics
Solutions

Avery Dennison Graphics Solutions Asia Pacific

www.graphicsap.averydennison.com