Avery Dennison
Graphics Solutions
Product Data Sheet

Asia Pacific
January 2022

MPI 2050 Matte Translucent
White Translucent Permanent
Revision 2

Introduction

Avery Dennison MPI 2050 is a white translucent film designed for use in illuminated signage and window applications where uniform light transmittance and excellent adhesion are required.

Face Film
86 micron matte white translucent polymeric calendered vinyl

Adhesive
Clear permanent acrylic

Backing
Two side PE coated Staflat™ paper, 145g/m2

Outdoor life**
Up to 6 years unprinted

Common Applications

- Illuminated signs
- Window graphics

Features

- Excellent printability on eco-solvent, solvent, latex and UV curable printers
- StaFlat liner provides easy handling and converting properties
- Easy application to a wide variety of light box substrates
- Excellent dimensional stability
- Excellent colour uniformity in reflected and transmitted light
- Excellent outdoor durability and performance
- Excellent adhesion to rigid and flexible sign face material

Conversion

- ◯ Flatbed cutters
- ◯ Friction fed cutters
- ◯ Die cutting
- ◯ Thermal transfer
- ◯ Screen printing
- ◯ Offset printing
- ◯ Cold overlaminating
- ◯ Electrostatic printing
- ◉ Eco solvent inkjet
- ◉ Solvent inkjet
- ◉ UV curable inkjet
- ◉ Latex inkjet

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Application:

- Refer to Instructional bulletin 2.03 for application to flex face material.
- Refer to Instructional bulletin 1.05 Procedures for Acrylic &; Polycarbonate Preparation.

General

Calliper, face film	ISO 534	86 micron
Calliper, face film & adhesive	ISO 534	111 micron
Gloss	Hunter Gloss @ 60°	20%
Dimensional stability^^	DIN 30646	< 1.651mm max
Adhesion, initial	FINAT FTM-1, Stainless steel	700 N/m
Adhesion, ultimate	FINAT FTM-1, Stainless steel	718 N/m
Shelf life	Stored at 22° C/50% RH	2 years
Flammability	ASTM E84 Class 1 or A rating	Self extinguishing
Expected Durability**	Vertical exposure	Up to 6 years (unprinted)

Thermal

Application temperature	Minimum: + 4°C
Temperature range	-45°C to +82°C

Chemical

Resistant to most mild acids, alkalies and salt solutions

Note

Materials have to be properly dried and cured before further processing, like laminating, varnishing, trimming, contour cutting or application. The residual solvents can otherwise change the products' specific features and properties.

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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.

****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.

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.

^^ Removability
Not removable when applied to nitrocellulose paints, fresh screen print inks, ABS, polystyrene & certain types of PVC.

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.

Testing 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.

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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