Avery Dennison Graphics Solutions Product Data Sheet

Asia Pacific July 2024

# MPI 4412 Coated Backlit 440 gsm Satin White Backlit Banner

Revision 1

# Introduction

Avery Dennison® MPI 4412 Coated Backlit is ideal for illuminated applications where a full colour image is to be illuminated under day and/or night conditions.

#### **Common Applications**

- Billboards
- Outdoor light boxes
- Indoor light boxes
- Public transport shelters
- Airport advertising



#### Face Film

440 gsm satin white translucent PVC banner



Scrim 1000 x 1000 denier Construction 20 x 20 per square inch

#### Features

- Strong 440gsm backlit construction
- Clean white backlit film offering a clearer and more visible image under illumination
- Up to 5m wide seamless construction
- Compatible with most solvent inkjet printers
- Rapid ink drying after printing
- Excellent tear resistance
- Reduced fraying when trimming and eyeleting
- Excellent outdoor durability
- Resistant to UV, rain, fungi and frost



### Outdoor life\*\*

Up to 3 year unprinted

#### Conversion

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



Avery Dennison Graphics Solutions Product Data Sheet

Asia Pacific July 2024

# **Applications**

• Refer to Instructional Bulletin 4.07 for Tips for Creating Digitally Printed Banners

# General

Roll width, length	1370mm, 3200mm, 4200mm, 5000mm	50m	
Caliper		440 gsm	
Tensile strength - length	ISO 13934-1:1999	255.0 kg / 50mm	
Tensile strength - width	ISO 13934-1:1999	224.3 kg / 50mm	
Tear strength - length	ISO 13937-2:2000	31.6 kg force	
Tear strength - width	ISO 13937-2:2000	29.5 kg force	
Shelf life	Stored at 22° C/50% RH	1 year	
Flammability	AS1530.3	Self extinguishing	
Expected Durability**	Vertical exposure	Un to 3 years	

# Thermal

Temperature range -30°C to +70°C

# Chemical

Fungi resistance ASTM G21-1996 0

# 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.

Avery Dennison Graphics Solutions Product Data Sheet

Asia Pacific July 2024

#### 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 auidelines.

# **Testing Methods**

#### Dimensional stability:

Is measured on a  $150 \times 150$  mm aluminium panel to which a specimen has been applied; 72 hours after application the panel is exposed for 48 hours to +  $70^{\circ}$ 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.

#### Flammahility

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.

Avery Dennison warrants that its Products meet its specifications. Avery Dennison gives no other express or implied guarantees or warranties with respect to the Products, including but not limited to, any implied warranties of merchantability, fitness for any particular use and/or non infringement. All Avery Dennison products are sold with the understanding that the purchaser has independently determined the suitability of such products for its purposes. The period of warranty is one (1) year from the date of shipment unless expressly provided otherwise in the product data sheet. All Avery Dennison's general terms and conditions of sale, see https://graphicsap.averydennison.com/terms. Avery Dennison's aggregate liability to Purchaser, whether for negligence, breach of contract, misrepresentation or otherwise, shall in no circumstances exceed the price of the defective, non-conforming, damaged or undelivered Products which give rise to such liability as determined by net price invoices to Purchaser in respect of any occurrence or series of occurrences. In no circumstances shall Avery Dennison be liable to Purchaser for any indirect, incidental or consequential loss, damage or injury, including without limitation, loss of anticipated profits, goodwill, reputation, or

to any interest institute of consequential costs, damage or injury, including without mindauli, loss or anticipated proints, goodward, reputation, of losses or expenses resulting from third party claims.

© 2024 Avery Dennison Corporation. All rights reserved. Avery Dennison and all other Avery Dennison brands, this publication, its content, product names and codes are owned by Avery Dennison Corporation. All other brands and product names are trademarks of their respective owners. This publication must not be used, copied or reproduced in whole or in part for any purposes other than marketing by Avery Dennison.

