Avery Dennison Graphics Solutions Product Data Sheet

Asia Pacific July 2024

700 Premium Film Opaque Film Revision 8

Introduction

Avery Dennison® 700 Premium Films are ideal for many medium-life indoor and outdoor applications with an excellent dimensional stability. Avery Dennison 700 Premium Films are available in a very extensive range of standard colours. Any other colour can be ordered through our extended colour match services.

Common Applications

- Flat sided trucks
- Cars and vans
- Buses
- Architectural signage
- Directional signage
- Window graphics
- Point of purchase



Face Film 64 micron polymeric calendered PVC



Backing One side coated Kraft paper, 130g/m²

Features

- Attractive film range with 100 colours – all REACh compliant
- High gloss appearance
- Excellent dimensional stability
- Superior cutting and weeding
- Good opacity
- Blue contrast backing paper on 700 PF White and 730 PF White Matte
- New liner imprint design with square pattern to support manual conversion



Adhesive Permanent acrylic



Outdoor life** Up to 8 years

Conversion

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



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Applications

- Refer to Instructional Bulletin 1.01 for Substrate Cleaning and Preparation
- Refer to Instructional Bulletin 1.4 for Application Methods for Pressure Sensitive Adhesive Films
- Refer to Instructional Bulletin 2.01 for Converting Tips for Avery Dennison Sign Films

General

| Caliper, face film Caliper, face film & adhesiveISO 53464 micron 85 micronGlossISO 2813 @20° ISO 2813 @85°Gloss 50% Matte 20%ElongationDIN 53455120%Dimensional stabilityDIN 306460.25mm maxAdhesion, initial Adhesion, ultimateASTM 1000, Stainless steel400 N/mAdhesion, ultimateStored at 22° C/50% RH2 yearsFlammabilityVertical exposure Black and white All colours and transparent MetallicsUp to 8 years Up to 7 years Up to 5 yearsThermalApplication temperatureMinimum: + 10°C | Roll width, length | 615mm, 1230mm | 50m | |
|---|-------------------------------|-----------------------------|--------------------|--|
| GlossISO 2813 @20° ISO 2813 @85°Gloss 50% Matte 20%ElongationDIN 53455120%Dimensional stabilityDIN 306460.25mm maxAdhesion, initial Adhesion, uttimateASTM 1000, Stainless steel400 N/mAdhesion, uttimateASTM 1000, Stainless steel500 N/mShelf lifeStored at 22° C/50% RH2 yearsFlammabilityVertical exposure Black and white All colours and transparent MetallicsUp to 8 years Up to 7 years Up to 5 yearsThermalXapplication temperatureMinimum: + 10°C | Caliper, face film | ISO 534 | 64 micron | |
| ISO 2813 @85°Matte 20%ElongationDIN 53455120%Dimensional stabilityDIN 306460.25mm maxAdhesion, initial Adhesion, ultimateASTM 1000, Stainless steel400 N/mAdhesion, ultimateASTM 1000, Stainless steel500 N/mShelf lifeStored at 22° C/50% RH2 yearsFlammabilityVertical exposure Black and white All colours and transparent MetallicsUp to 8 years Up to 7 years Up to 5 yearsThermalApplication temperatureMinimum: + 10°C | Caliper, face film & adhesive | ISO 534 | 85 micron | |
| ElongationDIN 53455120%Dimensional stabilityDIN 306460.25mm maxAdhesion, initial Adhesion, ultimateASTM 1000, Stainless steel400 N/mAdhesion, ultimateASTM 1000, Stainless steel200 N/mShelf lifeStored at 22° C/50% RH2 yearsFlammabilityVertical exposure Black and white All colours and transparent MetallicsUp to 8 years Up to 7 years Up to 5 yearsThermalApplication temperatureMinimum: + 10°C | Gloss | ISO 2813 @20° | Gloss 50% | |
| Dimensional stabilityDIN 306460.25mm maxAdhesion, initialASTM 1000, Stainless steel400 N/mAdhesion, ultimateASTM 1000, Stainless steel500 N/mShelf lifeStored at 22° C/50% RH2 yearsFlammabilitySelf extinguishingExpected Durability**Vertical exposure Black and white All colours and transparent MetallicsUp to 8 years Up to 7 years Up to 5 yearsThermalApplication temperatureMinimum: + 10°C | | ISO 2813 @85° | Matte 20% | |
| Adhesion, initial Adhesion, ultimateASTM 1000, Stainless steel400 N/mAdhesion, ultimateASTM 1000, Stainless steel500 N/mShelf lifeStored at 22° C/50% RH2 yearsFlammabilitySelf extinguishingExpected Durability**Vertical exposure Black and white All colours and transparent MetallicsUp to 8 years Up to 7 years Up to 5 yearsThermalApplication temperatureMinimum: + 10°C | Elongation | DIN 53455 | 120% | |
| Adhesion, ultimateASTM 1000, Stainless steel500 N/mShelf lifeStored at 22° C/50% RH2 yearsFlammabilityVertical exposure Black and white All colours and transparent MetallicsUp to 8 years Up to 7 years Up to 5 yearsThermalVertical exposure Black and white All colours and transparent MetallicsUp to 8 years Up to 5 yearsThermalMinimum: + 10°C | Dimensional stability | DIN 30646 | 0.25mm max | |
| Shelf life Stored at 22° C/50% RH 2 years Flammability Self extinguishing Expected Durability** Vertical exposure Black and white All colours and transparent Metallics Up to 8 years Up to 7 years Up to 5 years Thermal Application temperature Minimum: + 10°C | Adhesion, initial | ASTM 1000, Stainless steel | 400 N/m | |
| Flammability Self extinguishing Expected Durability** Vertical exposure Black and white All colours and transparent Metallics Up to 8 years Up to 7 years Up to 5 years Thermal Application temperature Minimum: + 10°C | Adhesion, ultimate | ASTM 1000, Stainless steel | 500 N/m | |
| Expected Durability** Vertical exposure Black and white Up to 8 years All colours and transparent All colours and transparent Metallics Up to 7 years Thermal Up to 5 years | Shelf life | Stored at 22° C/50% RH | 2 years | |
| Black and white Up to 8 years All colours and transparent Up to 7 years Metallics Up to 5 years | Flammability | | Self extinguishing | |
| All colours and transparent Up to 7 years Up to 5 years Thermal Application temperature Minimum: + 10°C | Expected Durability** | Vertical exposure | | |
| Metallics Up to 5 years Thermal Minimum: + 10°C | | Black and white | Up to 8 years | |
| Thermal Application temperature Minimum: + 10°C | | All colours and transparent | Up to 7 years | |
| Application temperature Minimum: + 10°C | | Metallics | Up to 5 years | |
| | Thermal | | | |
| | Application temperature | | Minimum: + 10°C | |
| Temperature range -40°C to +80°C | Temperature range | | -40°C to +80°C | |

Chemical

| Humidity resistance | 200 hours exposure | No effect |
|----------------------|----------------------|------------------------------|
| Corrosion resistance | 120 hours exposure | No contribution to corrosion |
| Water resistance | 24 hour immersion | No effect |
| Solvent resistance | Applied to aluminium | No effect |

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.

Testing Methods

Dimensional stability:

Is measured on a 150×150 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.



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.

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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