Technical specification sheet

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Product: Avery Dennison® High Performance Polymeric Calendered Overlaminate MPI 2000

AVERY DENNISON | Graphics Solutions

Category: Display & Visual - Solvent,Latex, Eco Solvent

Country of Origin: USA

Technical specifications:

Features

- Excellent printability and handling on all latex, eco-solvent & solvent inkjet printers
- Staflat liner provides easy converting properties
- Good outdoor durability and performance
- Good conformability to flat and simple curved surfaces
- Very good dimensional stability during use
- High gloss finish for superior appearance
- Excellent adhesion to most popular substrates

Description

Film: 80 micron gloss polymeric calendered vinyl

Adhesive: permanent acrylic

Backing: Two side PE coated Staflat paper, 140g/m^2

Outdoor life: Up to 7 years (unprinted)

Application surface: Flat, simple curves, gentle corrugations

Conversion+

- ☐ Flat bed cutters
- ☐ Friction fed cutters
- ☐ Die cutting
- ☐ Thermal transfer
- ☐ Screen printing
- ☐ Offset printing
- ☐ Cold overlaminating
- ☐ Electrostatic printing
- ■ **Latex inkjet**
- ■ **Eco solvent inkjet**
- ■ **Solvent inkjet**
- ■ **UV curable inkjet**

+Always test with your combination of printer and inks prior to commercial use.

Common Applications

- Flat sided trucks
- Cars and vans
- Trains and light rail
- Buses
- Outdoor advertising

Uses

Avery Dennison MPI 2000 is a high quality high performance grade vinyl film designed for use in a wide range of architectural, transportation and general signage applications where excellent durability and slight conformability are required.

General

Calliper, face film	ISO 534	80 micron
Calliper, face film & adhesive	ISO 534	120 micron
Dimensional stability	DIN 30646	0.3 mm max
Adhesion, initial	FINAT FTM-1, stainless steel	540 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	720 N/m
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Accelerated ageing	DIN 53387 100 hours exposure	No negative impact on film performance
Durability **	Vertical exposure ^	Up to 7 years unprinted

^ See ICS Performance Guarantee Durability Bulletin for your specific printer and ink combination for further information

Thermal

Application temperature	Minimum: + 10°C
Temperature range	- 40°C to + 80°C

Chemical

Resistant to most petroleum based oils, greases and aliphatic solvents

Resistant to most mild acids, alkalies and salts

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.

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'.

+Compatible with most media and ink combinations. Test prior to use.

***Information unavailable at time of printing.

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.

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 35ºC. After exposure, the film is removed and the panel is examined for traces of corrosion.

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Product: Avery Dennison® High Performance Polymeric Calendered Overlaminate MPI 2040

Gloss Clear Calendered Vinyl Permanent

Category: Display & Visual - Solvent,Latex, Eco Solvent

Country of Origin: USA

Technical specifications:

Features

- Excellent printability and handling on all latex, eco-solvent and solvent inkjet printers
- Staflat liner provides excellent converting properties
- Excellent clarity
- Excellent dimensional stability during use
- Very good outdoor durability and performance
- Good conformability to flat and simple curved surfaces
- High gloss finish for superior appearance
- Excellent adhesion to most popular substrates
- Available at 1.5m wide

Description

Film: 80 micron gloss clear polymeric calendered vinyl

Adhesive: Permanent acrylic

Backing: Two side PE coated Staflat paper, 140g/m^2

Outdoor life: Up to 7 years (unprinted)

Application surface: Flat, simple curves, gentle corrugations

Conversion+

- ☐ Flat bed cutters
- ☐ Friction fed cutters
- ☐ Die cutting
- ☐ Thermal transfer
- ☐ Screen printing
- ☐ Offset printing
- ☐ Cold overlaminating
- ☐ Electrostatic printing
- ☑ **Latex inkjet**
- ☑ **Eco solvent inkjet**
- ☑ **Solvent inkjet**
- ☑ **UV curable inkjet**

+Always test with your combination of printer and inks prior to commercial use.

Common Applications

- Window graphics
- Outdoor advertising
- Buses
- Trains and light rail
- Floor graphics

Uses

Avery Dennison MPI 2040 is a clear high performance calendered vinyl film designed for use in a wide range of promotional, and window applications where excellent printability and value for money is required.

General

Calliper, face film	ISO 534	80 micron
Calliper, face film & adhesive	ISO 534	110 micron
Dimensional stability	DIN 30646	0.4 mm max
Elongation	DIN 53455	>100%
Adhesion, initial	FINAT FTM-1, stainless steel	525 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	700 N/m
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Durability **	Vertical exposure ^	Up to 7 years unprinted

^ See ICS Performance Guarantee Durability Bulletin for your specific printer and ink combination for further information

Thermal

Application temperature	Minimum: + 10°C
Temperature range	- 40°C to + 80°C

Chemical

Resistant to most mild acids, alkalies and salts

Note:

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

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'.

+Compatible with most media and ink combinations. Test Prior to use.

***Information unavailable at time of printing.

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.

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 35ºC. After exposure, the film is removed and the panel is examined for traces of corrosion.

Product: Avery Dennison® High Performance Polymeric Calendered Overlaminate MPI 2041

Gloss Clear Calendered Vinyl Removable

Category: Display & Visual - Solvent,Latex, Eco Solvent

Country of Origin: USA

Technical specifications:

Features

- Excellent printability and handling on all latex, eco-solvent and solvent inkjet printers
- Staflat liner provides easy converting properties
- Excellent clarity
- Very good outdoor durability and performance
- Good conformability to flat and simple curved surfaces
- Excellent dimensional stability during use
- High gloss finish for superior appearance
- Easy and clean removability for up to 2 years

Description

Film: 80 micron gloss clear polymeric calendered vinyl

Adhesive: Removable acrylic
Removability: up to 2 years

Backing: Two side PE coated Staflat paper, 140g/m^2

Outdoor life: Up to 7 years (unprinted)

Application surface: Flat, simple curves, gentle corrugations

Conversion+

- ☐ Flat bed cutters
- ☐ Friction fed cutters
- ☐ Die cutting
- ☐ Thermal transfer
- ☐ Screen printing
- ☐ Offset printing
- ☐ Cold overlaminating
- ☐ Electrostatic printing
- ■ **Latex inkjet**
- ■ **Eco solvent inkjet**
- ■ **Solvent inkjet**
- ■ **UV curable inkjet**

+Always test with your combination of printer and inks prior to commercial use.

Common Applications

- Window graphics
- Outdoor advertising
- Buses
- Trains and light rail
- Floor graphics

Uses

Avery Dennison MPI 2040 is a clear high performance calendered vinyl film designed for use in a wide range of promotional, and window applications where excellent printability and value for money is required.

General

Calliper, face film	ISO 534	80 micron
Calliper, face film & adhesive	ISO 534	105 micron
Dimensional stability	DIN 30646	0.4 mm max
Elongation	DIN 53455	>100%
Adhesion, initial	FINAT FTM-1, stainless steel	240 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	300 N/m
Removability ^^	Glass and OEM painted surfaces	Up to 2 years
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Durability **	Vertical exposure ^	Up to 7 years unprinted

^ See ICS Performance Guarantee Durability Bulletin for your specific printer and ink combination for further information

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

Thermal

Application temperature	Minimum: + 10°C
Temperature range	- 40°C to + 80°C

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.

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.

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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.

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****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'.

+Compatible with most media and ink combinations. Test prior to use.

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.

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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Product: Avery Dennison® High Performance Polymeric Calendered Overlaminate MPI 2105

Easy Apply ™ and Easy Apply™ RS Long Term Removable StaFlat™

Category: Display & Visual - Solvent,Latex, Eco Solvent

Country of Origin: USA

Technical specifications:

Features

- Easy Apply™ adhesive system with air egress channels for fast bubble and wrinkle free application
- RS adhesive allows graphics to be repositioned during application
- Excellent printability on eco-solvent, solvent, latex and UV curable inkjet printers
- Two side PE coated StaFlat™ liner provides easy handling and converting properties
- Excellent outdoor durability and performance
- Excellent dimensional stability during use
- High gloss finish for superior appearance
- Grey adhesive provides extra opacity for blockout performance
- Easy removability with heat for up to 4 years with little or no adhesive residue

Description

Film: 80 micron high gloss white polymeric calendered vinyl

Adhesive: Grey permanent acrylic with Easy Apply and long term removability
Removability: Up to 4 years

Backing: Two side PE coated StaFlat™ paper, 145g/m^2

Outdoor life** : 7 years (unprinted)

Application surface: Flat, simple curves, gentle corrugations

Conversion+

- ☐ Flat bed cutters
- ☐ Friction fed cutters
- ☐ Die cutting
- ☐ Thermal transfer
- ☐ Screen printing
- ☐ Offset printing
- ☐ Cold overlaminating
- ☑ **Electrostatic printing**
- ☑ **Latex inkjet**
- ☑ **Eco solvent inkjet**
- ☑ **Solvent inkjet**
- ☑ **UV curable inkjet**

+Always test with your combination of printer and inks prior to commercial use.

Common Applications

- General Signage
- Trains and light rail
- Buses
- Flat sided trucks
- Outdoor advertising
- Window graphics

Application

- Avery Dennison Graphics recommend a maximum ink limit of 250% to ensure optimal performance
- Dry application only. Do not use water and detergent or a commercial application fluid to position the graphic.
- Refer to Instructional Bulletins 1.01, 1.4, 4.06 & 4.14 for printing, laminating and application instructions.

Uses

Avery Dennison® HP MPI 2105 Easy Apply™ and Easy Apply™ RS Calendered Vinyl films are flexible high gloss calendered vinyls. HP MPI 2105 Easy Apply™ (RS) offers exceptional value for applications requiring premium calendered film durability combined with a permanent or removable adhesive performance. HP MPI 2105 Easy Apply™ RS (Repositionable, Slidable) offers the benefits of reduced wrinkling and air entrapment inherent in the application of decals

General

Calliper, face film	ISO 534	80 micron
Calliper, face film & adhesive	ISO 534	120 micron
Dimensional stability	DIN 30646	1.651 mm max.
Elongation	DIN 53455 (Unprinted film)	Min 100%
Gloss	@ 60	85%
Adhesion, initial	ASTM 1000, stainless steel	450 N/m
Adhesion, 24 hours	ASTM 1000, stainless steel	550 N/m
Removability ^^	Smooth OEM painted surfaces	Up to 4 years
Flammability	Meets ASTM E84-04	Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Durability **	Vertical exposure^	Up to 7 years (unprinted)

^ See ICS Performance Guarantee Durability Bulletin for your specific printer and ink combination for further information

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

Thermal

Application temperature	Minimum: +10°C
Temperature range	- 45°C to +80°C

Chemical

Resistant to most mild acids, alkalies, and salts

Resistant to humidity and water

Note:

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

Important

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Warranty

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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'.

*Patent Info: May be covered by one or more patents US6,630,049, US7,060,351, US7,344,618, US7,332,205, EP1276605, EP1282472 and other US and foreign patents pending and others used under license.

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.

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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Product: Avery Dennison® High Performance Polymeric Calendered Overlaminate MPI 2006

Gloss White Premium Calendered Vinyl Permanent

Category: Display & Visual - Solvent,Latex, Eco Solvent

Country of Origin: USA

Technical specifications:

Features

- Excellent printability on eco-solvent, solvent, latex and UV curable inkjet printers
- StaFlat™ liner provides easy handling and converting properties
- High gloss finish for superior appearance
- Excellent adhesion to low surface energy and difficult to adhere to substrates, such as HDPE and matt interior painted walls
- Very good low temperature adhesive performance
- Good conformability to flat and simple curved surfaces
- Very good dimensional stability after installation
- Excellent outdoor durability and performance

Description

Film: 80 micron gloss white polymeric calendered vinyl

Adhesive: high tack, permanent acrylic, designed for low surface energy substrates

Backing: Two side PE coated StaFlat™ paper, 145g/m^2

Outdoor life: Up to 7 years (unprinted)

Application surface: Flat, simple curves, gentle corrugations

Conversion+

- ☐ Flat bed cutters
- ☐ Friction fed cutters
- ☐ Die cutting
- ☐ Thermal transfer
- ☐ Screen printing
- ☐ Offset printing
- ☐ Cold overlaminating
- ☐ Electrostatic printing
- ☒ **Latex inkjet**
- ☒ **Eco solvent inkjet**
- ☒ **Solvent inkjet**
- ☒ **UV curable inkjet**

+Always test with your combination of printer and ink prior to commercial use.

Common Applications

- Rubbish bin signage & advertising
- Port-a-loos
- Wall graphics
- General Signage
- Low surface energy substrates

Application

- Avery Dennison Dennison recommends a maximum total ink limit of 250% with solvent inkjet printing to ensure optimal performance.
- Refer to Instructional Bulletins 1.01, 1.4, 4.06 & 4.14 for printing, laminating and application instructions.

Uses

Avery Dennison MPI 2006 Hi-Tack is a high performance polymeric calendered film designed for use in a wide range of indoor or outdoor architectural, fleet and general signage applications where exceptional adhesion to LSE or difficult to adhere to substrates, application in low temperatures, excellent durability and slight conformability are required.

General

Calliper, face film	ISO 534	80 micron
Calliper, face film & adhesive	ISO 534	120 micron
Dimensional stability	DIN 30646	0.8 mm max
Elongation	ISO 527 (Unprinted film)	>225%
Gloss	ISO 2813, 20º	60
Adhesion, initial (20 mins)	FINAT FTM-1, stainless steel	940 N/m
Adhesion, ultimate (24 hrs)	FINAT FTM-1, stainless steel	1050 N/m
Adhesion, initial (20 mins)	FINAT FTM-1, HDPE	490 N/m
Adhesion, ultimate (24 hrs)	FINAT FTM-1, HDPE	525 N/m
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Accelerated ageing	DIN 53387 1000 hours exposure	No negative impact on film performance
Durability **	Vertical exposure	Up to 7 years (unprinted)

^ See ICS Performance Guarantee Durability Bulletin for your specific printer and ink combination for further information

Thermal

Application temperature	Minimum: + 5°C
Temperature range	- 40°C to + 80°C

Chemical

Resistant to most petroleum based oils, greases and aliphatic solvents

Resistant to most mild acids, alkalies and salts

Note:

Materials which have been solvent inkjet printed must 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.

Important

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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.

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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'.

+Compatible with most media and ink combinations. Test prior to use.

***Information unavailable at time of printing.

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.

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 35ºC. After exposure, the film is removed and the panel is examined for traces of corrosion.