Avery Dennison Graphics Solutions Product Data Sheet

Asia Pacific July 2024

# 800 Premium Cast Opaque Film Revision 6

# Introduction

Avery Dennison® 800 Premium Cast is a unique medium to long life film range that offers excellent dimensional stability. The face-film allows for easy and accurate application of finished lettering and graphics to curved and corrugated surfaces.

### **Common Applications**

- Corrugated trucks
- Flat sided trucks
- Cars and vans
- Buses
- Trains and light rail
- Architectural signage
- Directional signage
- Window graphics



Face Film 50 micron cast PVC

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Backing One side coated Kraft paper, 135g/m<sup>2</sup>

### Features

- 85 standard colors, including high gloss, matt and metallics all REACh compliant
- High gloss for superior appearance
- Excellent dimensional stability and layflatness during use and application
- Blue contrast backing paper on White Gloss and White Matt for ease of conversion
- New liner imprint design with square pattern to support manual conversion
- Improved handling during weeding and application
- Excellent conformability on curved and corrugated surfaces
- Outstanding durability and outdoor performance



Adhesive Permanent acrylic



Outdoor life\*\* Up to 10 years

### Conversion

- Flatbed cutters
- Friction fed cutters
- Die cutting
- $\bigcirc$  Thermal transfer
- Screen printing
- $\bigcirc$  Offset printing
- $\bigcirc$  Cold overlaminating
- $\bigcirc$  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

Roll width, length	615mm, 1230mm	50m	
Caliper, face film	ISO 534	50 micron	
Caliper, face film & adhesive	ISO 534	75 micron	
Gloss	ISO 2813 @20°	Gloss 50%	
	ISO 2813 @85°	Matte 20%	
Elongation	DIN 53455	130%	
Dimensional stability	DIN 30646	0.2mm max	
Adhesion, initial	ASTM 1000, Stainless steel	500 N/m	
Adhesion, ultimate	ASTM 1000, Stainless steel	600 N/m	
Shelf life	Stored at 22° C/50% RH	2 years	
Flammability		Self extinguishing	
Expected Durability**	Vertical exposure		
	Black and white	Up to 10 years	
	All colours and transparent	Up to 8 years	
	Metallics	Up to 5 years	
Thermal			
Application temperature		Minimum: + 10°C	
Temperature range		-40°C to +110°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  $150 \times 150$  mm aluminium panel to which a specimen has been applied; 72 hours after application the panel is exposed for 48 hours to + 70°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<sup>®</sup> 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<sup>®</sup> 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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