

Product Data Bulletin

MPI 2003EZ Calendered Vinyl Film (Revision 0)
Date: 10/09/03

Description:

Avery Dennison™ MPI 2003EZ Calendered Vinyl film is a flexible, low gloss, calendered vinyl film. Avery Dennison™ MPI 2003EZ offers exceptional value for applications requiring premium calendered film durability combined with permanent or removable adhesive performance. The Avery Dennison™ Easy Apply feature offers the benefits of reduced wrinkling and air entrapment inherent in the application of decals and graphics. For equipment/material compatibility, durability, processing tips, warranted inks, or recommended clear coats and overlaminates reference Instructional Bulletins #5.30, #5.80 and #5.91.

Construction:

Face Film:	3.4 mil (97µm) flexible, matte, calendered vinyl film
Adhesive:	<i>Permanent pressure sensitive adhesive with 3 year removability</i>
Release Liner:	90# StaFlat with green Avery® imprint

Physical Properties:

The following information on physical and chemical characteristics is based upon tests believed to be reliable. The values are intended only as a source of information. They are given without guaranty and do not constitute a warranty. The purchaser should independently determine, prior to use, the suitability of this material for his/her specific purpose. (Data represents averages and is not intended for use as a specification).

Recommended Print Method:	Reference IB #5.80
Outdoor Durability (printed film):	Up to 5 YEARS when printed with approved printer/inks and overlaminated or clear coated. (Reference IB #5.30).
Clean Removability	Up to 3 YEARS clean removability
Minimum Surface/Ambient Air Application Temperature	40° F (4° C)
Application Surface:	Flat; simple curves (Restricted to non-spill areas)
Service Temperature Range:	-40° F to 180° F (-40° C to 82° C) (Reasonable range of temperatures which would be expected under normal environmental time and temperature conditions)
Typical Film Caliper (w/adhesive):	4.8 mils (122 µm)
Chemical Resistance:	Resistant to mild acids, alkalis, and salt solutions
Shelf Life:	One year when stored at the following temperatures and humidity conditions 68°-77° F (20° - 25° C) and 50±5% R. H.



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Typical Adhesion Values:	180° Peels		
	<i>Substrate</i>	<i>24hrs</i>	<i>1week</i>
	Stainless Steel	2.1 lbs/in (367 N/m)	4.0 lbs/in (700 N/m)
	NOTE: Tested per ASTM 1000. Always pretest your specific substrate prior to actual application.		
Tensile at Yield:	4.0 lb/in. to 8.0 lb/in. (0.7 kg/cm to 1.5 kg/cm)		
Elongation:	100% minimum (unprinted film)		
Dimensional Stability:	Less than 0.015 in. (0.4 mm) shrinkage determined by measurement of unprinted 36 in. ² (232 cm ²) film applied to aluminum test panel after 72 hrs. aging at 73°F (23°C) 50 ±5% R.H. followed by 48 hrs. at 150°F (65°C).		

Application Information:

The following Avery Dennison literature will provide complete information to the user for proper application, storage, and other requirements and is available upon request from your Avery Dennison representative or from the Avery Dennison web-site (www.digital.averygraphics.com).

Instructional Bulletins:	I B #
Substrate Cleaning and Preparation	#1.10
Storage, Maintenance and Cleaning of PVC Films	#1.20
Application Instructions	#4.04
Premask Recommendations	#5.50
Removal Instructions	#4.10

Typical Converting Methods:

Thermal Die-Cutting	Yes, 290° F - 300° F (143° C to 149° C) for 0.5 - 1.0 second. Cutting temperatures and dwell times will vary with differences in die configuration and individual machines. Always test prior to production.
Steel Rule Die-Cutting	Yes

Revisions have been italicized.

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