

Product Data Bulletin

MPI 1005 EZ Fleet Marking Film (Revision 3)

Date: 04/02/02

Description:

Avery Dennison™ MPI 1005 EZ Fleet Marking Film is a premium quality opaque film designed for use in fleet marking and corporate identification applications requiring enhanced ease-of-use during application. The patent-pending Avery Dennison™ Easy Apply feature offers the benefits of reduced wrinkling and air entrapment inherent in the application of decals and graphics. Avery Dennison's patented removable adhesive system offers residue-free removal over the warranted life of a graphic applied to many typical commercial and fleet vehicle surfaces.

Construction:

Face Film:	2.1 mil (53 µm) solid color, opaque vinyl film
Adhesive:	Removable pressure sensitive adhesive.
Release Liner:	90# StaFlat®

Product 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 guarantee and do not constitute a warranty. The purchaser should independently determine, prior to use, the suitability of this material for his/her specific purpose and should always pretest specific substrate prior to application. (Data represents averages and is not intended for use as a specification).

Recommend Print Method:	Solvent Inkjet (Reference IB #5.80 for recommended printer / ink combinations).
Outdoor Durability:	Up to 5 years when properly printed with approved printer/ink and overlaminates or clear coats. (Reference IB #5.30)
Minimum Surface/Ambient Air Application Temperature	45°F (7°C) Flat surfaces with / without rivets 50°F (10°C) for corrugated surfaces.
Maximum Application Temperature:	100°F (38°C)
Service Temperature Range:	-50° - 180°F (-45° - 82° C) (Reasonable range of temperatures which would be expected under normal environmental conditions).
Application Surface:	Flat, flat with rivets, rivets and corrugations. NOTE: Overlaminated graphics are not recommended on rivet & corrugated surfaces.
Removability:	Clean removal for warranted life of the graphic from recommended OEM substrates. (Heat and proper removal methods are required).
Chemical Resistance:	Resistant to most petroleum based oils, greases and aliphatic solvents. Resistant to mild acids, alkalies, salts.
Shelf Life:	One year when stored at the following temperatures and humidity conditions: 68° - 77°F (20° - 25°C) and 50 ± 5% R.H.
Typical Film Caliper (w/adhesive):	3.1 mils (79 µm)



Product Data Bulletin

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)
	<i>NOTE: Tested per ASTM 1000. Always pretest your specific substrate prior to actual application.</i>		
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

Conversion Information:

Thermal Die-Cutting:	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

Patent Pending "US Patent 6,299,956".

Revisions have been italicized.

Avery Dennison™ is a registered trademark of Avery Dennison Corp.

WARRANTY: All statements, technical information and recommendations about Avery Dennison products are based upon tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that Purchaser has independently determined the suitability of such products for its purposes. Avery Dennison products are warranted to be free from defects in material and workmanship for either one year (or the period stated on the specific product information literature in effect at time of delivery, if longer) from date of shipment if said product is properly stored and applied. It is expressly agreed and understood that Avery Dennison's sole obligation and Purchaser's exclusive remedy under this warranty, under any other warranty, express or implied, or otherwise, shall be limited to repair or replacement of defective product without charge at Avery Dennison's plant or at the location of product (at Avery Dennison's election), or in the event replacement or repairs is not commercially practical, to Avery Dennison's issuing Purchaser a credit reasonable in light of the defect in the product.

Avery Dennison's liability for defective products shall not exceed the purchase price paid therefore by Purchaser and in no event shall Avery Dennison be responsible for any incidental or consequential damages whether foreseeable or not, caused by defects in such product, whether such damage occurs or is discovered before or after replacement or credit, and whether or not such damage is caused by Avery Dennison's negligence.

NO EXPRESS WARRANTIES AND NO IMPLIED WARRANTIES, WHETHER OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE, OR OTHERWISE (EXCEPT AS TO TITLE), OTHER THAN THOSE EXPRESSLY SET FORTH ABOVE WHICH ARE MADE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, SHALL APPLY TO PRODUCTS SOLD BY AVERY DENNISON. AVERY DENNISON SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER SUCH WARRANTIES. NO WAIVER, ALTERATION, ADDITION OR MODIFICATION OF THE FOREGOING CONDITIONS SHALL BE VALID UNLESS MADE IN WRITING AND MANUALLY SIGNED BY AN OFFICER OF AVERY DENNISON.

