Avery *Dennison*[®] **HP** MPI 2102 / 2103 Gloss

Permanent / Removable StaFlat™

Revision: 4 Dated: 11/26/13

Uses:

Avery *Dennison*® HP MPI 2102 and 2103 Gloss films are flexible calendered vinyl films. HP MPI2102 and 2103 Gloss offer exceptional value for applications requiring premium calendered film durability combined with a permanent or removable adhesive performance.



Face: 3.1 mil (80 microns) high

gloss calendered



Adhesive: Acrylic MPI 2103 – Perm (gray) MPI 2102 – Rem (gray)



Liner: 90# StaFlat™



Durability: Up to 6years

(unprinted)

Application Surfaces:

Flat, simple curves (restricted to non-spill areas)

Features:

- 100% opacity completely covers whatever is underneath
- High Gloss finish
- Outstanding durability and outdoor performance
- Great image clarity and color pop
- Dimensionally stable liner for easy converting
- MPI 2102 Removable up to two (2) years
- ICC profiles available on Avery Dennison's website (<u>www.iccprofiles.averygraphics.com</u>)

Conversion:

- Thermal Die-Cutting
- Flat Bed Sign-Cut
- Drum Roller Sign-Cut
- Steel Rule Die-Cutting
- Solvent based inkjet
- Mild/Eco Solvent inkjet
- UV inkjet
- Latex Inkjet

Common Applications:

FleetVehicle

- Wall Murals
- POP/ Tradeshow
- Outdoor Signage
- Floor Graphics

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averygraphics.com AnswerLine: 800-231-4654

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Physical Characteristics:

Property		Value
Caliper, face		3.1 mil (80µm)
Caliper, adhesive		1.5mil (40 µm)
Dimensional stability		<0.065"(1.651 mm)
Stability		Note: Ink loads in excess of 250% may cause increased shrinkage of the printed film.
Tensile at Yield		
Elongation		
Gloss	Hunter Gloss @ 60	<16
Adhesion: 15 min.	Adhesive Removable	1.3 lbs/in (240 N/m)
Adhesion 24 hrs	Permanent	2.8 lbs/in (300 N/m) 1.7 lbs/in (438 N/m)
Auriesion 24 ms	Removable Permanent	3.4 lbs/in (600 N/m)
	· oao	G. 1. 155/11. (GGG 1.4/11.)
Flammability		Self Extinguishing
Shelf-Life		2 years from date on label
		(up to 2 years
		unprocessed, OR process
		within one year and apply
D I- 224	Mantia	within 1 year of processing)
Durability	Vertical	Unprinted –6 years
Min. Application	Exposure	50°F (10°C)
Temperature		30 1 (10 0)
Service		-50° - 180°F (-40° - 82° C)
Temperature		(Reasonable range of
•		temperatures which would
		be expected under normal
		environmental conditions).
Chemical		Resistant to most mild
resistance		acids, alkalis, and salt
		solutions.

Removable adhesive is not cleanly removable from nitrocellulose Paints, ABS, polystyrene, or PVC.

Important:

Information on physical and chemical characteristics are based on tests believed to be reliable. The values are intended only as a source of information. This information is given without guaranty and do not constitute a warranty. The purchaser should independently determine, prior to use, the suitability of any material for their specific purpose. (Data represents average values where applicable, and is not intended for specification purposes)

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 *two years* (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.

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Dimensional stability:

Is measured on a 6" x 6" (150 x 150 mm)aluminum panel to which a specimen has been applied; 72 hours after application the panel is scored in a cross pattern, exposed for 48 hours to 150 °F (65 °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 panel, 24 hours after the specimen has been applied under standardized conditions. Initial adhesion is measured 15 minutes after application of the specimen.

Flammability:

A specimen applied to aluminum 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.

Revisions are italicized

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