

# Product Data Bulletin

MPI 2010 & 2012 Calendered Vinyl Film (Revision 2)

Date: 09/13/01

## Description:

Avery Dennison™ MPI 2010 and MPI 2012 Calendered Vinyl film is a flexible, matte, calendered vinyl film. Avery Dennison™ MPI 2010 and MPI 2012 offer exceptional value for applications requiring premium calendered film durability combined with permanent or removable adhesive performance. 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:

### MPI 2010

<b>Face Film:</b>	3.4 mil (86µm) flexible, matte, calendered vinyl film
<b>Adhesive:</b>	S-652 permanent, clear permanent acrylic pressure-sensitive adhesive
<b>Release Liner:</b>	90# StaFlat with green Avery® imprint

### MPI 2012

<b>Face Film:</b>	3.4 mil (86µm) flexible, matte, calendered vinyl film
<b>Adhesive:</b>	R-197 removable, gray permanent acrylic pressure-sensitive adhesive
<b>Release Liner:</b>	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).

<b>Recommended Print Method:</b>	Reference IB #5.80
<b>Outdoor Durability (unprinted film):</b>	Up to 5 years when properly processed and applied (vertical exposure unprinted film)
<b>Outdoor Durability (printed film):</b>	Up to 5 years when printed with approved printer/inks and overlaminated or clear coated. (Reference IB #5.30).
<b>Minimum Surface/Ambient Air Application Temperature</b>	40° F (4° C)
<b>Application Surface:</b>	Flat; simple curves (Restricted to non-spill areas)
<b>Service Temperature Range:</b>	-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)
<b>Typical Film Caliper (w/adhesive):</b>	4.2 mils (106 µm)
<b>Chemical Resistance:</b>	Resistant to mild acids, alkalis, and salt solutions
<b>Shelf Life:</b>	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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<b>Dimensional Stability:</b>	Less than 0.015 in. (0.4 mm) shrinkage determined by measuring shrinkage of unprinted film applied to 36 in. <sup>2</sup> (232 cm <sup>2</sup> ) aluminum test panel after 72 hrs. aging at 73° F (23° C) and 50±5% R.H. followed by 48 hours at 150° F (65° C)
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## Typical Converting Methods:

<b>Thermal Die-Cutting</b>	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.
<b>Steel Rule Die-Cutting</b>	Yes

*Revisions have been italicized.*

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