

# PRODUCT DATA SHEET

## Avery Dennison® MPI™ 1405 EA RS

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### Introduction

MPI 1405 EA RS is a premium high gloss polyurethane film designed for use on vehicle wrapping and outdoor architectural applications where sustainable PVC-free solution is required. MPI 1405 EA RS offers excellent 3D conformability, extended durability together fast and easy application using EA RS technology, covering a wide range of both wrapping and architectural applications with one optimal solution.

### Description

Film	51 microns high gloss polyurethane film
Adhesive	grey, long term removable, acrylic based
Backing paper	Two side PE coated StaFlat™ paper, 145g/m2

### Conversion

MPI 1405 EA RS are ultra-premium products, delivering maximum durability for a wide range of graphics applications. The films are suitable for use on a variety of super-wide format inkjet printers using solvent, eco solvent, UV\* or latex ink.

To enhance color and to protect images against UV radiation and abrasion, it is recommended to protect Avery Dennison MPI 1405 EA RS using an overlamine - Avery Dennison DOL 6460 Gloss.

For recommended combinations of DOL films and media, please refer to "Technical Bulletin 5.3. Recommended combinations of Avery Dennison Overlaminates and Avery Dennison Digital Print Media".

For information on how to apply Avery Dennison MPI 1405 EA RS Films, please refer to "Technical Bulletin 5.10. Application of Avery Dennison PVC-free Wrapping Films".

### Uses

- Full vehicle wraps and vehicle graphics
- Outdoor architectural surfaces like cement, brick, and concrete surfaces.
- All permanent applications requiring high conformability

### Features

- Excellent print performance with dedicated profiles across all digital platforms- latex, solvent, eco-solvent, UV - with one product
- Quick and easy installation over complex curves and deep recesses with Easy Apply RS technology, which eliminates wrinkles and bubbles for both demanding vehicle and outdoor architecture applications
- Reliable performance with clean long term removable adhesive for easy removal at end of life
- High gloss and attractive whiteness enabling eye-catching graphics that stand out on both vehicle wrapping applications and on outdoor architectural applications
- Exceptional durability up to 12 years unprinted

\* Limitations of the inks to be taken into account

\*\* When used in combination with DOL 6460 Gloss

**Physical properties**

Features	Test method <sup>1</sup>	Results
Caliper, facefilm	ISO 534	51 micron
Caliper, facefilm + adhesive	ISO 534	62 micron
Elongation, typical value	DIN 53455	150 %
Dimensional stability	FINAT FTM 14	0.4 mm max.
Adhesion, initial	FINAT FTM-1, stainless steel	320 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	370 N/m
Flammability		Self-extinguishing
Shelf life	Stored at 22° C/50-55 % RH	2 years
Durability, unprinted	Vertical exposure	12 years

**Temperature range**

Features	Results
Minimum application temperature:	≥10 °C
Service temperature:	- 40 °C to + 80 °C

**NOTE:** Materials have to be properly dried before further processing, like laminating, varnishing or application. The residual solvents can otherwise change the products' specific features

For good print and converting result we recommend to let the rolls acclimatize in the print/lamination room at least 24 hours before printing or converting. Too much temperature or humidity deviation between material and room climate can cause layflatness and/or printability issues.

Generally, constant material storage conditions of ideally 20°C (+/-2°C) /50% rh (+/- 5%), without too big climate deviations, will support a more robust and stable printing/converting process. For further details, please refer to TB 1.11.

**Important**

Information on physical and chemical 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 this material to their specific use.

All technical data are subject to change. In case of any ambiguities or differences between the English and foreign versions of these Conditions, the English version shall be controlling.

**Warranty**

All Avery Dennison statements, technical information and recommendations are based on 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.

All Avery Dennison's products are sold subject to Avery Dennison's general terms and conditions of sale, see <http://terms.europe.averydennison.com>

**1) Test methods**

More information about our test methods can be found on our website.

**2) Durability**

The durability is based on middle European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased.