# PRODUCT DATA SHEET

# Avery Dennison® MPI™ 3020 Matt High Opacity Series

#### Introduction

Avery Dennison Multi Purpose Inkjet 3000 High Opacity series (HOP) films are matt white, self-adhesive short-term calendered vinyls with high opacity properties, offering a choice between permanent and removable adhesives.

MPI 3020 Gloss HOP film features such as high opacity (above 99%), clear permanent and removable adhesive and good printability with attractive whiteness make it an optimal solution for a wide range of short-term, promotional applications, allowing customers to significantly reduce their inventory.

MPI 3024 HOP Easy Apply, part of MPI 3020 HOP series, is using Easy Apply technology allowing fast and easy bubble free application for effective promotions and short-term flat applications.

Description

Film: MPI 3020/3021 HOP 95 micron white matt PVC film.

MPI 3024 HOP EA 95 micron white matt PVC film.

Adhesive: MPI 3020 HOP Permanent, clear, acrylic based.

MPI 3021 HOP Removable, clear, acrylic based. MPI 3024 HOP EA Removable, clear, acrylic based.

Backing: MPI 3020/3021 HOP Clay coated kraft paper, 125 g/m2.

MPI 3024 HOP EA Clay coated kraft paper with air egress channels, 136 g/m2

### Conversion

MPI 3020 Matt HOP series films are multi-purpose vinyls, suitable for a variety of wide format inkjet printers using hard solvent, eco/mild solvent, UV-curing or latex inks.

To enhance colour and to protect images against UV radiation and abrasion, it is recommended to protect Avery Dennison MPI 3020 Gloss HOP series films using an overlaminate or varnish.

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".

## Uses

- Interior & exterior signs, including over posting applications
- Window decoration
- Promotional, point of sale, advertising applications on flat surfaces

### **Features**

- Excellent printability and handling on selected printers
- Superior whiteness and high opacity properties film
- Easy cutting and application on a wide variety of substrates
- High opacity film with clear permanent or removable adhesive constructions allow to cover a wide range of applications and significantly reduce customer inventory
- MPI 3024 HOP Easy Apply enabling fast and easy application, cover-up performance for effective promotions. The tack of the product on specific substrates should be tested prior to final application. To ensure strong tack with air egress, alternative application techniques may be used.



issued: 08/2018

# PRODUCT CHARACTERISTICS

# **Physical properties**

Features Caliper, facefilm Dimensional stability	Test method <sup>1</sup> ISO 534 FINAT FTM 14	Results 95 micron 0.3 mm max.
Opacity	ISO 2471	> 99 %*
* Not a blockout film, opacity on par with MPI 3002/3003 MPI 3020 HOP		
Adhesion, initial	FINAT FTM-1, stainless steel	540 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	740 N/m
MPI 3021 HOP		
Adhesion, initial	FINAT FTM-1, stainless steel	310 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	465 N/m
MPI 3024 HOP EA		
Adhesion, initial	FINAT FTM-1, stainless steel	150 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	230 N/m
Flammability		self-extinguishing
Shelf life Durability	Stored at 23°C/50-55% RH Vertical exposure	2 years 3 years

# Temperature range

FeaturesResultsMin. application temperature≥+10°CService temperature-45°C to +80°

**NOTE**: Materials have to be properly dried before further processing, for example laminating, varnishing or application. The residual solvents could 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 24h 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 22%/50-55% RH, 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, for non-static applications (vehicles). Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of static signs facing south, west, or southwest, in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased.

