

# PRODUCT DATA SHEET

## Avery Dennison® 5000 Flexible Substrate

Issued: 10/2022

### Introduction

Avery Dennison® 5000 Flexible Substrate is a unique product, that can be decorated with Avery Dennison® 5500 QM, a translucent pressure sensitive film, which when applied to Avery Dennison® 5000 Flexible Substrate, provides excellent performance for external backlit signs, awnings or billboards.

### Conversion

Avery Dennison® 5000 Flexible Substrate is a flexible substrate with a high-count 1000 denier polyester fabric. The coating contains the finest additives for prohibiting microbial growth. The outer top coating on the face (smooth) side is designed to:

- » Block any possible plasticizer migration
- » Increase UV resistance by filtering and reflecting UV rays
- » Be impervious to solvents, graffiti, airborne pollution, bird dropping and leaf stains
- » Create a surface that allows self-adhesive films to bond and adhere without bubbling and peeling
- » Lower surface tension so rainwater washes clean

### Recommendations

- » Backlit signs
- » Awnings
- » Billboards

Avery Dennison® 5000 Flexible Substrate is fully compatible with Avery Dennison® 5500 QM and 5600 LD Translucent Film series.

Screen inks, spray paints and computerized print methods are in general fully compatible with Avery Dennison® 5000 Flexible Substrate, but the decoration medium should be tested by the converter or reviewed with Avery Dennison® technical support, prior to its decoration process and final use.

### Avery Dennison® Flexible Substrate

- » Should be cleaned in case of stains with the use of IPA (Isopropyl alcohol 100%) only. Customers should test the solvent first prior to use on the material
- » Is made with a polyester fabric. It is recommended to stretch the face in the sign frame in the length direction of the fabric first and then complete tensioning in the width direction or machine direction
- » Can be heat-sealed
- » Should never be folded, but always rolled up for storage or transport

### Features

- » Durability: 10 years
- » Pure white, translucent color which completely diffuses fabric weave
- » Decoration with Avery Dennison® 5500 QM Translucent Films gives excellent visual and durability results
- » Smoothness that can shed airborne dirt and grime
- » Very wide seamless widths, so that seams and shadows do not interfere with the sign design



#### Face Film

Polyester fabrics, 500 micron



#### Adhesive

No



#### Backing

No



#### Durability

10 years



#### Shelf Life

2 years

- » Self cleaning properties preventing airborne dirt and pollutants adherence
- » Resistance to fading, discoloration, cracking and weathering
- » Resistance to mildew, fungus and wicking

## Physical Characteristics

Product	Test method <sup>1</sup>	Results
Caliper, facefilm (micron)	ISO 534	500
Total weight (g/m <sup>2</sup> )	ISO 536	650
Base fibre	D-TEX	polyester (low shrink)
	Denier	1100 x 1000
Thread count (cm <sup>2</sup> )		9 x 9
Shelf life (years)	Stored at 22° C/50-55 % RH	2
Durability <sup>2</sup> (years)	Vertical exposure	10
Light transmission (%)		24 ± 2
Weatherability	QUV >3000 hrs	Excellent
Flame resistance	DIN 4102, part 1 (Flame out: 2 sec / max: 3.5 char)	B1
Wicking resistance		Anti-wick warp Slight-wick fill
<b>Adhesive</b>		
Tensile strength (kg/25mm)	DIN 53455	150 x 150
Elongation at break (%)	DIN 53455	20-25
Tear resistance (N)	(warp / fill)	300 x 400
<b>Temperature range</b>		
Cold resistance (°C)		-30
Heat resistance (°C)		+70
<b>Chemical properties<sup>3</sup></b>		
Mildew resistance		Excellent, no growth

## Important

Information on physical and chemical characteristics and values in this document are based upon tests we believe to be reliable and do not constitute a warranty. 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 this document, the English version shall be prevailing and leading.

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.

3) Prolonged immersion in gasoline and similar fluids is not recommended.

*Avery Dennison warrants that its Products meet its specifications. Avery Dennison gives no other express or implied guarantees or warranties with respect to the Products, including, but not limited to, any implied warranties of merchantability, fitness for any particular use and/or non infringement. All Avery Dennison products are sold with the understanding that the purchaser has independently determined the suitability of such products for its purposes. The period of warranty is one (1) year from the date of shipment unless expressly provided otherwise in the product data sheet. All Avery Dennison's products are sold subject to Avery Dennison's general terms and conditions of sale, see <http://terms.europe.averydennison.com>.*

*Avery Dennison's aggregate liability to Purchaser, whether for negligence, breach of contract, misrepresentation or otherwise, shall in no circumstances exceed the price of the defective, non-conforming, damaged or undelivered Products which give rise to such liability as determined by net price invoices to Purchaser in respect of any occurrence or series of occurrences. In no circumstances shall Avery Dennison be liable to Purchaser for any indirect, incidental or consequential loss, damage or injury, including without limitation, loss of anticipated profits, goodwill, reputation, or losses or expenses resulting from third party claims.*

*© 2022 Avery Dennison Corporation. All rights reserved. Avery Dennison and all other Avery Dennison brands, this publication, its content, product names and codes are owned by Avery Dennison Corporation. All other brands and product names are trademarks of their respective owners. This publication must not be used, copied or reproduced in whole or in part for any purposes other than marketing by Avery Dennison.*