

# PRODUCT DATA SHEET

## Avery Dennison® Paint Protection Film SPF XI

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### Introduction

AD Supreme Protection Film SPF-XI is a premium engineered thermoplastic polyurethane film in transparent clear gloss finish, designed to protect a vehicle's finish against stone chips, road debris, insect stains, small to medium scratches, chemical stains and weathering, without degrading the original paint. SPF-XI has a "self-healing" top coat, which helps small scratches in the film disappear at room temperature, maintaining the pristine look of the vehicle.

### Conversion

SPF-XI is designed for vehicle paint and painted surface protection purposes and is easy to size by manual cutting during application or digital cutting plotters. It is also possible to apply SPF-XI on top of pre-existing and applied Avery Dennison Supreme Wrapping Film™. Material should be applied using the wet application method. For more information please refer to TB. 6.0.

Note: Always remove the protective PET top sheet immediately after cutting material from the roll or before converting using a plotter or flatbed cutter. Always store unused material on the roll and tightly wound and secure.

### Recommendations

- » Protection of the highly sensitive external surfaces of the vehicle, such as bumper, side mirrors, hood & wheel arches.
- » Protection of painted internal metal surfaces, such as luggage racks or chairs in busses or trains.
- » Protection of painted metal surfaces in high traffic areas such as reception desks, door impact areas, wall panels and more.

### Features

- » Top-coating - increases the resistance to external damages
- » "Self-healing" - helps small scratches in the film disappear at room temperature, without the need of any heat source.
- » Up to 10 years protection- maintaining the quality of vehicle finish
- » Exceptional visual properties - enhancing the look of the vehicle with optical clarity & high gloss finish
- » Premium grade, conformable thermoplastic polyurethane (TPU) film.



#### Face Film

165 micron, gloss clear top-coated thermoplastic polyurethane protected with PET sheet



#### Adhesive

Permanent, UV resistant, solvent acrylic base



#### Backing

PET liner



#### Durability

Zone 1 vertical 10 years



#### Shelf Life

2 years Stored at 22°C 50-55 % RH

## Physical Characteristics

	Test method <sup>1</sup>	Results	
<b>Product</b>			
Caliper, facefilm (micron)	ISO 534	165	
Caliper, facefilm + adhesive (micron)	ISO 534	200	
Caliper, liner (micron)	ISO 534	80	
Gloss (GU)	ISO 2813, 20°	>90 GU	
Dimensional stability (mm max.)	FINAT FTM 14	0.15	
Shelf life (years)	Stored at 22° C/50-55 % RH	2	
<b>Adhesive</b>			
Tensile strength@ Break (MPa)	ISO 527	>20	
Elongation@ Break (%)	ISO 527	>200	
Adhesion, initial 180° 20 min (N/m)	FINAT FTM-1, stainless steel	>350	
Adhesion, ultimate 180° 72 hours (N/m)	FINAT FTM-1, stainless steel	>600	
<b>Temperature range</b>			
Application temperature (Minimum: °C)		10	
Service temperature (°C to +°C)		-40 to +100	
<b>Chemical properties<sup>2</sup></b>			
	Visual Inspection after exposure to following test fluids		
Gasoline resistance	30 min	No Significant Change	
Diesel resistance	24 hours	No Significant Change	
Water & Soap	24 hours	No Significant Change	
Mild Acids	4 hours	No Significant Change	
Cleaning Fluid	24 hours	No Significant Change	
Motor Oil	24 hours	No Significant Change	
<b>Durability<sup>3</sup></b>			
	<b>Zone 1</b>	<b>Zone 2</b>	<b>Zone 3</b>
<b>Vertical</b>	10 Years	8 Years	6 Years
<b>Horizontal</b>	7 Years	4 Years	3 Years
<b>Heat Aging</b>	500 hrs @90 °C		dE<2
<b>Water Immersion</b>	400 hrs @40 °C		No Significant Change

## 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) Prolonged immersion in gasoline and similar fluids is not recommended

**3) 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..**

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