

Avery Dennison®

Pure Defense PU Paint Protection Film

Revision: 1

Dated: 01/05/19

Introduction

AD Pure Defense PU paint protection film is a general purpose clear polyurethane film that is designed to protect a vehicle's finish against stone chips, road debris, insect stains, heavy use, chemical stains and weathering without degrading the original paint work.

AD Pure Defense PU paint protection film can be used to invisibly protect external paint finishes of all types of vehicles and also internal surfaces like, high impact areas, luggage racks and reception desks.

Description

Facefilm : 150 micron, clear polyurethane protected with PET sheet

Adhesive: permanent, UV resistant, solvent acrylic base

Liner: PET liner

Conversion

Product is designed for vehicle paint and painted surface protection purposes and is easy to size by manual cutting during application. Material should be applied using the wet application method for more information please refer to TB. 6.10.

Features:

- High Gloss, 150my PU film
- High transparent finish
- Uniformity of the surface
- Flexible (suitable for bumper and wing mirror applications)
- Has self healing feature with heat trigger
- Up to 8 years durability (vertical, Zone1)

Common Applications:

- Protection of the highly sensitive external surfaces of vehicle like; bumper, side mirrors, hood, wheel arches
- Protection of internal surfaces like, luggage racks or chairs in busses or trains
- Protection of surfaces in high traffic areas like, reception desks, door impact areas, wall panels and more

PRODUCT CHARACTERISTICS

Physical Properties

Features	Test Method ¹	Typical Value
Caliper, Facefilm (w/o protection sheet)	ISO 534	150 µm
Caliper, Facefilm + Adhesive	ISO 534	185 µm
Caliper, Liner	ISO 534	36 µm
Tensile strength @ Break	ISO 527	> 35 MPa
Dimensional Stability	DIN 30646	0.15 mm max
Elongation @ Break	ISO 527	>150%
Gloss	ISO 2813, 20°	>90 GU
Shelf Life	Stored at 22°C 50-55 % RH	2 years
Application Temperature		Minimum: 10°C
Service Temperature		-40°C to +100°C

Adhesive Properties

Features	Test Method ¹	Typical Value
Initial Adhesion 180° (20 min)	FINAT FTM-1, stainless steel	400 N/m
Ultimate Adhesion 180° (72 hours)	FINAT FTM-1, stainless steel	700 N/m

Durability²

	Zone 1	Zone 2	Zone 3
Vertical	8 years	5 years	2 years
Horizontal	4 years	2.5 years	1 year
Heat Aging		500 hrs @ 90°C	ΔE < 2

Chemical Resistance

Visual Inspection after exposure to following test fluids

Gasoline Resistance	30 minutes	No Significant Change
Water & Soap	24 hours	No Significant Change
Cleaning Fluid	1 hour	No Significant Change
Motor Oil	24 hours	No Significant Change

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.

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

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, in industrially polluted areas or high altitudes, exterior performance will be decreased.