Avery Dennison Graphics Solutions Product Data Sheet

Asia Pacific April 2023

# Supreme<sup>™</sup> PPF Enduro Paint Protection Film

Revision 0

## Introduction

Avery Dennison® Supreme™ PPF Enduro Paint Protection Film is designed as an optically-clear film, ideal for protection of OEM painted surfaces from stone chips, road debris, insect stains and weathering. Used as a protective film in automotive, RV, marine and architectural markets.

# Common Applications

- Motor vehicle surfaces
- Marine craft surfaces
- Architectural surfaces



#### Face Film

135 micron gloss clear top-coated aliphatic polyurethane (PU) film



## Backing

75 micron Polyester

#### Feature

- Attractive gloss finish
- Heat activated self-healing top coat provides effective scratch resistance
- Optimum conformability of aliphatic polyurethane (PU) film
- Effective protection of OEM painted surfaces from stone chips, road debris, insect stains and weathering
- Optical clarity providing invisible protection
- Sufficient durability and outdoor life
- UV, temperature, humidity, chemical and salt-spray resistance
- Good adhesion to new generation of automotive clear coats
- Protective PET top sheet helps maintain gloss and surface uniformity during transport\*



#### Adhesive

Permanent, acrylic based



# Outdoor life\*\*

Up to 3 years

#### Conversion

- Flatbed cutters
- Friction fed cutters
- Die cutting
- Hand cutting



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## **Application**

- Wet application only. Slip Solution: Combine 100% distilled water with 2 ml of recommended soap per litre of water.
- For installation tips and guides please refer to Avery Dennison® Instructional Bulletins:
  - o 1.01 Substrate Cleaning and Preparation
  - o 1.15 Application Instructions for SPF Supreme Protection Film

# General

| Calliper, face film + Top Coat | ISO 534                      | 135 micron             |
|--------------------------------|------------------------------|------------------------|
| Adhesive                       | ISO 534                      | 30 micron              |
| Gloss 60°                      | ISO 2813                     | 90 GU                  |
| Mil. spec. shrinkage           | FINAT, FTM-14                | <0.1%                  |
| Tensile strength               | ISO 527                      | 25 MPa                 |
| Elongation at break            | ISO 527                      | 250%                   |
| Adhesion, initial              | FINAT FTM-1, Stainless steel | 550 N/m                |
| Adhesion, ultimate             | FINAT FTM-1, Stainless steel | 750 N/m                |
| Shelf life                     | Stored at 22° C/50% RH       | 12 months from Mfg dt. |
| Expected Durability**          | Vertical exposure (Zone 2)   | Outdoor: 3 years       |

# **Thermal**

Application temperature Between 15°C & 30°C

# Chemical

| Gasoline, 30min           | No effect |
|---------------------------|-----------|
| Car Wash Solution, 30min  | No effect |
| Antifreeze, 30min         | No effect |
| Diesel, 30min             | No effect |
| Heptane, 30min            | No effect |
| 10% Sulphuric acid, 30min | No effect |
| Isopropyl alcohol, 30 min | No effect |

<sup>\*</sup>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.

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#### Important

Information on physical 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 any material for their specific

All technical data is subject to change without prior notice.

#### Warranty

Avery Dennison® materials are manufactured under careful quality control and are warranted to be free from defect in material and workmanship. Any material shown to our satisfaction to be defective at the time of sale will be replaced without charge. Our aggregate liability to the purchaser shall in no circumstances exceed the cost of the defective materials supplied. No salesman, representative or agent is authorised to give guarantee, warranty, or make any representation contrary to the foregoing. All Avery Dennison® materials are sold subject to the above conditions, being part of our standard conditions of sale, a copy of which is available on request.

## \*\*Expected Durability

The expected durability of Avery Dennison films are defined as the expected performance life of the Avery Dennison graphic film(s) within Zone 2 of the Avery Dennison zone system, in outdoor vertical exposure conditions.

The actual performance life will depend on a variety of factors, including selection and preparation of substrate, angle and direction of exposure, application methods, environmental conditions and cleaning/maintenance of the films.

In case of films used in areas of high temperatures or humidity, high altitudes and industrially polluted areas the performance will be further reduced.

# **Testing Methods**

## Dimensional stability:

Is measured on a  $150 \times 150$  mm aluminium panel to which a specimen has been applied; 72 hours after application the panel is exposed for 48 hours to +  $70^{\circ}$ C, after which the shrinkage is measured.

#### Adhesion:

(FTM-1, FINAT) is measured by peeling a specimen at a 180° angle from a stainless steel or float glass panel, 24 hours after the specimen has been applied under standardised conditions. Initial adhesion is measured 20 minutes after application of the specimen.

## Flammability:

A specimen applied to aluminium is subjected to the flame of a gas burner for 15 seconds. The film should stop burning within 15 seconds after removal from the flame.

## Temperature range:

A specimen applied to stainless steel is exposed at high and low temperatures and brought back to room temperature. 1 hour after exposure the specimen is examined for any deterioration. Note: Prolonged exposure to high and low temperatures in the presence of chemicals such as solvents, acids, dyes, etc. may eventually cause deterioration.

## Chemical Resistance:

All chemical tests are conducted with test panels to which a specimen has been applied. 30 Mins after application the panels are immersed in the test fluid for the given test period. 1 hour after removing the panel from the fluid, the specimen is examined for any deterioration.



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