Avery Dennison Graphics Solutions Product Data Sheet

Asia Pacific September 2024

SPF 1000Premium Grade Paint Protection Film

Revision 1

Introduction

Avery Dennison® Supreme™ Protection Film SPF-1000 is an 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-1000 has a "self-healing" top coat, which helps small scratches in the film disappear when film is exposed to heat. The top coat of SPF-1000 has been specially designed to enhance its stain resistance, make the film easier to clean and maintain, and reduce potential discoloration or yellowing from stains or interaction with chemicals.

Common Applications

- Motor vehicle surfaces
- Marine craft surfaces
- Architectural surfaces



Face Film

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



Backing

75 micron Polyester



Adhesive

Clear, Acrylic based



Outdoor life**

Up to 10 years

Features

- X-ProofTM top-coated high gloss finish
- Heat activated self-healing top coat provides excellent scratch resistance
- Conformable aliphatic polyurethane (PU)
 film
- Superior protection of OEM painted surfaces from stone chips, road debris, insect stains and weathering
- Exceptional optical clarity providing invisible protection
- Outstanding durability and outdoor life
- Excellent UV, temperature, humidity, chemical and salt-spray resistance
- Excellent adhesion to new generation of automotive clear coats
- Protective PET top sheet helps maintain gloss and surface uniformity during transport*

Conversion

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



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Applications

Wet application recommended. Soap Solution: Combine 100% distilled water with 2 ml of soap per litre of water.

- Refer to Instructional Bulletin 1.01 for Substrate Cleaning and Preparation
- Refer to Instructional Bulletin 1.15 for Application Instructions for Supreme PPF

*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

General

Roll width, length	1524mm	23m	
Caliper, face film	ISO 534	200 micron	
Caliper, face film & adhesive	ISO 534	230 micron	
Gloss	ISO 2813 @60°	90 GU	
Dimensional Stability	FINAT FTM-14	<0.1%	
Tensile strength	ISO 527	25 MPa	
Elongation	ISO 527	300%	
Adhesion, initial	FINAT FTM-1, Stainless steel	550 N/m	
Adhesion, ultimate	FINAT FTM-1, Stainless steel	650 N/m	
Shelf life	Stored at 22° C/50-55 % RH	1 year	
Expected Durability**	Horizontal exposure	Up to 10 years	

Thermal

 Application temperature
 Between 15°C & 35°C

Chemical

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

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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.

**Warranted Period Definitions

The warranted period is the maximum period of time Avery Dennison® will warrant the finished products performance in accordance with the Supreme™ PPF Warranty Terms and Conditions, provided that the film is properly stored, converted and installed in accordance with Avery Dennison® guidelines. Warranty is based on outdoor exposure conditions in Zones 1, 2 and 3, unless otherwise stated, and applied to recommended substrates. For details on warranted period please see Supreme™ PPF Warranty Bulletin.

Testing Methods

Dimensional stability:

Is measured on a 150×150 mm aluminium panel to which a specimen has been applied; 72 hours after application the panel is exposed for 48 hours to + 70° 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. 72 hours 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.

Corrosion Resistance:

A specimen applied to aluminium is exposed to saline mist (5% salt) at 35°C. After exposure, the film is removed and the panel is examined for traces of corrosion.

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