

911 EVG Emergency Vehicle Graphics Reflective Prismatic Sheeting

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Product Description

Avery Dennison® 911EVG is a conformable micro-prismatic, retroreflective film designed for use as a graphics media for emergency vehicles, such as police cars.

Product Features

- Conformable product structure capable of being applied to the contours and curves of automobile body panels
- Prismatic grade reflectivity levels to provide the brightest vehicle graphics
- Smooth, flexible vinyl outer face
- Two different adhesive options: permanent or removable
- Removable adhesive option which is 100% removable using little or no heat and leaving virtually no adhesive residue
- Friction-coated, polyester release liner for smooth tracking on friction-fed plotters
- Screen printable with many UV and solvent inks
- Minimal tooling lines so as to not detract from the graphics' aesthetic qualities
- Consistent color across the face of the product without distracting gridlines and cellular patterns
- Metalized microprisms to ensure total internal reflection and the highest levels of reflectivity
- Arrays of microprisms are rotated at 30° increments to minimize the rotational sensitivity associated with many microprismatic sheetings
- Seven Colors: White, Yellow, Red, Green, Blue, Gold, and Orange

Applications and Uses

911 EVG is designed specifically for short-term vehicle graphic applications.

Performance and Physical Properties

Outdoor Durability	3 years, when properly processed and applied (vertical exposure, unprinted film).
Minimum Application Temperature	55° F (13° C)
Application Surface	Flat and contoured surfaces
Application Substrates	OEM Vehicle Paint Finishes. Note: Not recommended for use on stainless steel.
Service Temperature Range	-10° to 140° F (-12° to 60° C).
Film Caliper (w/adhesive)	13.0 ± 1.0 mils
Shelf Life	One year when stored at the following temperatures and humidity conditions 68°-77° F (20° - 25° C) and 50±5% R. H.
Removable Adhesive	Removable adhesive can be removed with little or no heat up to 3 years leaving little or no residue

Aesthetic Consistency

Unlike other microprismatic retroreflective materials, 911 EVG has no subsurface gridlines or cellular patterns that may detract from either the daytime or nighttime appearance of the graphic. Similarly, the tooling lines within the 911 EVG sheeting are less than 0.00065” in thickness.

Retroreflectivity

The retroreflective elements of 911 EVG are metalized microprismatic elements. To minimize the rotational sensitivity of the product, arrays of the microprismatic elements are rotated in 30-degree increments throughout the sheeting. This ensures that the product remains bright regardless of the rotation of the material. However, when cutting words or letters, it is still recommended to align all letters in the same direction to maximize the uniformity of their appearance.

911 EVG, unprinted, has the following typical and minimum coefficients of retroreflection (R_A) (cd/lux/m²) at a -4° entrance angle and a 0.2° observation angle:

Color	Typical Coefficient of Retroreflection (R_A)	Minimum Coefficient of Retroreflection (R_A)
White	650	400
Gold	410	240
Yellow	410	240
Orange	245	150
Red	115	70
Green	40	20
Blue	30	15

Screen Printing

911 EVG can be screen printed with a variety of UV and Solvent-based screen inks. With respect to solvent-based inks, vinyl-based screen inks will typically yield the best results. During oven drying, prolonged exposure to temperatures above 120°F should be avoided or curl of the material may result. 911 EVG is designed to be screen printable as received. However, in some instances, due to specific shop or environmental conditions, it may be useful to wipe the face of the sheeting with a mild alcohol wipe.

The following is a partial list of recommended ink systems which have been successfully used on 911 EVG. This list does not constitute a warranty and should not be used as such. The user is encouraged to pre-test each specific application to determine the suitability of the ink. For more information, please reference Instruction Bulletin #3.00.

- Coates J. Series
- Sericol TMI II / TMI 1000 Clearcoat
- Ink Dezyne VP Series
- Sericol Duracal UV Series
- Nazdar 9700 All Purpose Ink
- Sericol Plactical (PC)
- Nazdar Plastic Plus
- Sericol UVRP
- Nazdar System 2
- Sericol UV2

Application Method

Use a dry method. Do not use a detergent and water or a commercial application liquid to position the graphic. Avery Dennison® only warrants this material when applied to a factory-approved paint finish.

Cutting

Caution!
When using any equipment, always follow the manufacturers' instructions for safe operation.

Recommended cutting methods:

- Guillotine
- Steel Rule Die-Cutting
- Hand Cut
- Flat-bed Electronic Cutting
- Computer Sign Cutting (use a 60° blade, and double-cutting may be required depending on the cutting device used)

Thermal die cutting is not recommended and may damage the material.

Reference Instructional Bulletins 2.10, 8.20, 8.25 and 8.50 for more recommended instructions and details.

Application Tape

The type of application tape depends upon the type of graphic produced and the ink or overlamine used. Please reference Instruction Bulletin 2.10 or 8.25 for more details.

Product Data and Specifications

These are typical values for the Avery Dennison® 911 EVG and are not intended to be used in specifications. Please contact your sales representative for a product specification.

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