

PRODUCT DATA SHEET

Avery Dennison® Chevron V-8000 Series

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Introduction

Avery Dennison® Chevron series is based on the V-8000 High Visibility Reflective Film Series. Conditions on the roads can sometimes endanger the lives of people working in public services. Those needing protection at all times of day include fire fighters, police, emergency response personnel, and road safety/construction workers.

Effective hazard markings make vehicles much more visible, and the high performance of micro-prismatic reflective materials ensures that emergency vehicles stand out to passing motorists day and night. A vivid fluorescent yellow/red improves the day-time visibility of emergency vehicles in unfavourable weather conditions, giving drivers time to respond to hazards ahead.

Versions

Avery Dennison Chevron White/Red

Used on vehicles with special traffic rights such as construction fleets or maintenance and cleaning vehicles. Avery Dennison Chevron White/Red can be used for this marking and was produced in accordance to DIN 30710, DIN 67520, DIN 6171 and TP ESC-B (Certificates available upon request).

Avery Dennison Chevron FYG/Red

First response vehicles can be marked in accordance to the French regulation TP ESC-B (Certificates available upon request) with fluorescent yellow/red chevrons.

Description

Facefilm: Vinyl Retroreflective Film with Microprisms, partly screen printed
Adhesive: Permanent, pressure sensitive, clear acrylic
Backing paper: 90# imprinted StaFlat

Features

- Single solid metallic layer construction: resists dirt and water penetration, dents and reflectivity loss
- Performs well on simple vehicle curves, facing any direction, creating high uniform brightness at night
- Easy to handle and apply, conforms to simple curves
- Withstands normal vehicle maintenance

Recommendations for use

Medium to long term fleet marking. Application on metal and painted metal as well as on flat, simple curves. This does not include rivets.

Specification Limits

Avery Dennison V-8000 typical retroreflectivity performance is comparable to the following specifications:

ASTM Type IV	Global
Class 3, RA2	Europe
DIN3070, DIN67520, DIN 6171	Germany
TPESC-B	France, Europe

²Base White and Fluorescent Yellow-Green sheeting only

More information about specifications and regulations can be found in the Avery Dennison Reflective regulatory overview.

Conversion

Avery Dennison® Chevron V8000 Reflective films can be converted using a wide variety of conversion techniques including steel rule die-cutting, thermal die-cutting, flatbed Sign-cut or Drum Roller sign-cut. Always test suitability of Chevron V8000 prior to use. (For application and care instructions, please refer to Technical Bulletin 6.9)

Physical and Chemical Properties

Physical properties

Features	Test method ¹	Results
Caliper, laminate		533 – 660 µm
Dimensional stability	ASTM D4956	0.8 mm. max
Shelf life	Stored at 23°C/50% RH	1 year from the date of purchase
Outdoor Durability ² , unprinted		
Avery Dennison Chevron White/Red	Vertical exposure only	up to 7 years
Avery Dennison Chevron FYG/Red	Vertical exposure only	up to 5 years

Temperature range

Features	Results
Application temperature	Minimum: +16°C
Service temperature	-23° to +65° C

Chemical properties

Solvent resistance

When properly processed and applied the film is resistant to most common solvents. When tested according LS-300C, Section 3.6.2, after immersion in the following solvents for the specified length of time, the film shows no deterioration.

Kerosene and Turpentine: 10 minutes, Toluene, Xylene and Methyl alcohol: 1 minute.

NOTE: Materials have to be properly dried before further processing, for example laminating, varnishing or application. The residual solvents could change the products' specific features. For good print and converting result we recommend to let the rolls acclimatize in the print/lamination room at least 24h before printing or converting. Too much temperature or humidity deviation between material and room climate can cause layflatness and/or printability issues. Generally, constant material storage conditions of ideally 20°C (+/-2°C) /50% RH (+/- 5%), without too big climate deviations, will support a more robust and stable printing/converting process.

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. In case of any ambiguities or differences between the English and foreign versions of these Conditions, the English version shall be controlling.

Warranty

Avery Dennison® branded 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 any guarantee, warranty, or make any representation contrary to the foregoing.

All Avery Dennison® branded materials are sold subject to the above conditions, being part of our standard conditions of sale, a copy of which is available on request.

1) Test methods

More information about our test methods can be found on our website.

2) Durability

The durability is based on middle European exposure conditions. The durability of fluorescent yellow-green and fluorescent orange is based on northern Europe performance. 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