

# PRODUCT DATA SHEET



## Avery® NV-700

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### Introduction

Avery® Night Vision NV-700 is a multi-purpose retro reflective product. It consists of a durable cast PVC retro-reflective film that has excellent cutting and weeding performances as well as printing on screen and digital presses. A high level of reflectivity makes this a very versatile product that offers exceptional value for architectural, transportation, and general signage applications requiring conformability and extended durability.

### Description

Facefilm: High gloss, Cast retro-reflective Vinyl Film  
Adhesive: Permanent, pressure sensitive, clear acrylic  
Backing paper: 90# imprinted StaFlat<sup>1</sup>

### Features

- Excellent cutting, weeding and transferring characteristics
- Excellent printing results on screen and digital presses
- Type 1 reflectivity levels
- Flexible cast vinyl
- High dimensional stability
- Extensive colour range
- Colour matching option

### Typical Reflectivity Values

#### Standard Colours

Colour	White	Yellow	Red	Orange	Blue	Green
Coeff of Retro-Reflection*	70	50	14	25	4	9
Reference	NV-700	NV-701	NV-702	NV-704	NV-705	NV-707

\* Cd/Lx/m<sup>2</sup> at an entrance angle of 5° and observation angle of 0.2°.

### Conversion

Avery® NV-700 can be converted using a wide variety of conversion techniques including steel rule die-cutting, guillotine cutting, rotary cutting and thermal die-cutting. Always test suitability of NV-700 prior to use.

### Application

Application on flat surfaces and simple curves with or without rivets<sup>2</sup>. Not recommended for unpainted stainless steel. Wet method application is not recommended. The use of wet application invalidates the standard warranty.

<sup>1</sup> White and Yellow only, other colors #90 High Release liner

<sup>2</sup> It is recommended to cut out rivets



## Physical and Chemical Properties

### Physical properties

Features	Test method <sup>1</sup>	Results
Caliper, facefilm + adhesive		180 - 190 µm
Dimensional stability	1000 hrs AtlasTwin Arc Wheatherometer, EH	0.75 mm max.
Shelf life	Stored at 23°C/50% RH	1 year
Outdoor Durability <sup>2</sup>	Vertical exposure	7 years

### Temperature range

Features	Results
Application temperature	Minimum: +10°C squeeze roll appl.
Service temperature	-40° to +80° C

### Chemical Properties

#### Solvent resistance

When properly processed and applied the film is resistant to most common solvents. When tested according to 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.

#### Colour consistency

Due to the nature of retroreflective material, graphics comprised of multiple pieces of film may give the perception of a colour shift depending on the viewing angle and light source. This is not considered a defect in the material. To minimise this effect, cut letters from one continuous piece of material or use materials from adjacent portions of the roll. Also, a small overlap (5 mm) or no overlap of the retroreflective film is recommended to maintain a consistent viewing angle.

#### Important

Information on product characteristics and physical and chemical properties 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

Avery® 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® 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. 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.

