

## PRODUCT DATA SHEET



# Avery® Carbon Films

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### Introduction

Avery Carbon Films are durable, flexible films which provide excellent weatherability and dimensional stability. Avery Carbon Films are available in black or transparent appearance.

### Description

Facefilm: 90 micron specialty calendered vinyl film  
Adhesive: clear, permanent, acrylic based  
Backing paper: one side coated white kraft paper, 140 g/m<sup>2</sup>

### Conversion

Avery Carbon Films offer excellent weeding and cutting performance on a wide range of computer sign making equipment in all popular sizes. Avery Carbon Films are not recommended to be thermal transfer printed, screen or digital printed.

### Features

- Outstanding durability and outdoor performance.
- Suitable for flat and simply curved surfaces only.
- Excellent layflatness and stability during cutting and weeding.
- High gloss for superior appearance.
- Excellent dimensional stability during use and application.

### Recommendations for use

Avery Carbon Films can generally be used for lettering and decorations on flat to slightly curved surfaces.

- Vehicle graphics
- Decoration graphics



[www.averygraphics.com](http://www.averygraphics.com)

### Graphics Division

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## PRODUCT CHARACTERISTICS

Avery® Carbon Films

### Physical properties

Features	Test method <sup>1</sup>	Results
Caliper, facefilm	ISO 534	90 micron
Caliper, facefilm + adhesive	ISO 534	115 micron
Gloss	ISO 2813, 20°	N/A
Dimensional stability	DIN 30646	0,7 mm. max
Adhesion, initial	FINAT FTM-1, stainless steel	540 N/m
Adhesion, ultimate	FINAT FTM-1, stainless steel	720 N/m
Flammability		self-extinguishing
Accelerated ageing	SAE J 1960, 1000h exposure	No negative impact on film performance
Shelf life	Stored at 22° C/50-55 % RH	1 years
Durability <sup>2</sup>	Vertical exposure	2 years

### Temperature range

Features	Results
Application temperature	Minimum: +5° C
Temperature range	-40° to + 80° C

### Chemical resistance

Features	Test method <sup>1</sup>	Results
Humidity resistance	200 hours exposure	No effect
Corrosion resistance	120 hours exposure to corrosion	No contribution
Water resistance	48 hours immersion	No effect

#### 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.

#### 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.



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