**Transparent Synthetic** 

Revision: 11 Dated: 02/23/23

#### Uses:

Avery Dennison DOL 6460 Clear Gloss and 6470 Clear Luster Polyurethane is a premium quality, flexible film designed for use as a protective overlaminate film for screen and digitally printed decals. DOL 6460 and 6470 offer exceptional values for applications requiring abrasion resistance, conformability, and color durability. The gloss film features a synthetic liner that creates a super smooth high gloss finish which provides an overall paint like finish of printed graphics.



Face: 1.5 mil (38 microns) urethane film



**Adhesive:** Permanent Acrylic (clear)



Liner

DOL6460 -2 mil Transparent Synthetic DOL6470 - kraft



Durability: Up to 6 years

Application Surfaces:

Flat, Flat with Rivets, Corrugations, Complex Curves, Deep Recesses (Extreme vehicle wraps)

#### Features:

- High gloss finish DOL6460
- Luster finish DOL6470
- Three year horizontal durability
- Protects image from scratches
- Enhances color and depth of image
- Superior conformability to irregular substrates
- Outstanding durability and outdoor performance
- Excellent dimensional stability
- Aids in application of printed graphic
- Excellent UV, temperature, humidity, and salt-spray resistance
- ASTM E-84 Class 1 or A rating

#### Conversion:

Cold Overlaminating

Plotter Cut (for best results use 60° blade)

### **Common Applications:**

- Fleet
- Vehicle
- Marine/ Watercraft
- POP / Trade Show
- Wall Murals

- Window Graphics
- Outdoor Signage

### **Product Data Sheet**

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www.graphics.averydennison.com Customer Service: 800-282-8379

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### **Physical Characteristics:**

Property	Measurement	Typical Values	
Caliper, face		1.5 mil (38 µm)	
Caliper, adhesive		1.0 mil (25 µm)	
Dimensional stability		<0.015" (0.4mm)	
Tensile at Yield		4.0 - 8.0 lb/in (0.7–1.5 kg/cm)	
Elongation		200% min.	
Gloss	Hunter Gloss @ 60 degrees	DOL6460 - 90 GU DOL6470 - 15GU	
Adhesion:		3.0 lbs/in (525 N/m) 4.0 lbs/in (700 N/m)	
Flammability	ASTM E84	Self Extinguishing DOL6460 Class 1 or A rating DOL6470 Class 1 or A rating	
Shelf-Life		2 years from the date of manufacture (when stored at the following temperatures and humidity conditions 68°-77° F (20° - 25° C) and 50±5% R. H.)	
Durability		Zone 1 Zone 2 Zone 3	
	Vertical Exposure	6 4.8 2.4	
	Horizontal Exposure	3 2.4 1.2	
		see ICS Performance Guarantee for printer specific durability Reference IB 1.30 for zone information.	
Min. Application Temperature		40° F (4° C)	
Service Temperature		-40° to 180°F (-40° to 82° C) (Reasonable range of temperatures which would be expected under normal environmental conditions).	
Chemical resistance		Resistant to most mild acids, alkalis, and salt solutions including water. Resists Petroleum Vapors	
Compliance		California Proposition 65	

 $\label{lem:decompose} \mbox{ Data represents average values where applicable, and is not intended for specification purposes.}$ 

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### Warranty:

This Warranty applies to the Product listed in this Data Sheet. All statements, technical information (including physical and chemical characteristics) and recommendations about Avery Dennison products are based upon tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold subject to the Purchaser's assent and agreement that Purchaser is responsible for, and has independently determined, the suitability of such products for its purposes or its customer's purposes. Avery Dennison products are warranted to be free from defects in material and workmanship (i) for two years from the date of manufacture, or (ii) from the date of manufacture until the expiration of the period stated on the specific Product Data Sheet in effect at the time of delivery. Such time periods are subject in either case to the proper storing and application of said product, and the failure to properly store or apply the product, including without limitation the failure to follow any applicable Instructional Bulletin, negates any warranty. It is expressly agreed and understood that Avery Dennison's sole obligation and Purchaser's exclusive remedy under this warranty, under any other warranty, express or implied, or otherwise, shall be limited exclusively to: (a) repair or replacement of defective product without charge at Avery Dennison's plant or at the location of the product (at Avery Dennison's election), or (b) in the event repair or replacement are not commercially practical, a credit amount up to the price of the product taking into account the defect in the product in Avery Dennison's sole discretion.

THE WARRANTY EXPRESSLY SET FORTH ABOVE IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR USE AND/OR NON-INFRINGEMENT. SELLER SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER SUCH WARRANTIES. NO WAIVER, ALTERATION, ADDITION OR MODIFICATION OF THE FOREGOING CONDITIONS SHALL BE VALID UNLESS MADE IN WRITING AND MANUALLY SIGNED BY AN OFFICER OF AVERY DENNISON.

AVERY DENNISON'S LIABILITY FOR DEFECTIVE PRODUCTS SHALL NOT EXCEED THE PURCHASE PRICE PAID THEREFORE BY PURCHASER AND IN NO EVENT SHALL AVERY DENNISON BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHETHER FORESEEABLE OR NOT, CAUSED BY DEFECTS IN SUCH PRODUCT, WHETHER SUCH DAMAGE OCCURS OR IS DISCOVERED BEFORE OR AFTER REPLACEMENT OR CREDIT, AND WHETHER OR NOT SUCH DAMAGE IS CAUSED BY AVERY DENNISON'S NEGLIGENCE.

All sales and contracts for sale of Products are subject to Purchaser's assent and agreement to this Warranty. Avery Dennison hereby objects to any terms or conditions contained in any purchase order or other communication of any kind from the Purchaser that is conflicting, inconsistent or additional to this Agreement.

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#### IMPORTANT INFORMATION:

Due to their inherent high water vapor transmission, urethane films are more prone to develop fungal growth in high temperature, high humidity environments. Film cosmetic issues caused by the formation of mold, mildew, or other fungal growth is not warranted.

Isopropyl Alcohol (IPA) along with some strong solvents and acids react with the urethane film. Prolonged exposure (soaked cloth, immersion, etc.) should be avoided to prevent damage to the film. Brief exposure with IPA to clean the surface is possible as long as the exposed area is wiped dry with a clean cloth immediately after. It is highly recommended that all cleaning liquids be properly tested to ensure compatibility with the film.

Fuel (gasoline) spills should be cleaned immediately. Rinse the area with water or a mild detergent and water mix and dry.

### **Special Considerations:**

When overlaminating UV printed graphics: Heat assist and increasing lamination pressure when applying the overlaminate will reduce the silvering that can occur when laminating UV printed graphics. Do not exceed 115° F (46° C) on the top or bottom roll. Roll pressure up to 100 psi may be used. When applying the overlaminate in this manner, use the minimum amount of unwind tension on the overlaminate to reduce stretching during application.

### **Related Documents:**

The following Avery Dennison® literature will provide complete information to the user for proper application, storage, and other requirements and is available upon request from your Avery Dennison representative or from the Avery Dennison website (www.graphics.averydennison.com).

Document Title	Reference Number
Substrate Cleaning and Preparation	Instructional Bulletin #1.10
Storage, Maintenance, and Cleaning of PVC Films	Instructional Bulletin #1.20
Warranty of Films	Instructional Bulletin #1.30
Cleaning and Maintenance of Vehicle Wraps	Instructional Bulletin #1.50
Tips for Overlaminating, Premasking & Packaging Graphics	Instructional Bulletin #5.50
Removal Instructions	Instructional Bulletin #4.10

Revisions are italicized

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