

Avery Dennison® UC900 Ultimate Cast Series White Diffuser

Permanent Kraft

Revision: 2 Dated: 04/15/20

Uses:

Avery Dennison UC900 Ultimate Cast Diffuser Films are premium quality cast films which are specially designed for graphic applications involving illuminated light box applications. Avery Dennison UC900 Diffuser Films are designed to provide partial light blocking to prevent “hot spots” in backlit signage..



Face: 2.1 mil (53 microns) cast film



Adhesive: Clear Permanent Acrylic



Liner: 78# Kraft

Application Surfaces: Flat

Features:

- Outstanding durability and outdoor performance
- Dimensionally stable liner for easy converting
- Excellent conversion on CAD plotters
- Easy cutting & weeding
- Excellent dimensional stability
- Excellent UV, temperature, humidity, and salt-spray resistance
- Eliminates tube light show through
- Reduces brightness of lighting

Conversion:

- Thermal Die-Cutting
- Steel Rule Die-Cut
- Flatbed Sign-Cut
- Drum Roller Sign-Cut

Common Applications:

- Architectural Signage
- Backlit Rigid Signs
- Outdoor Advertising
- Directional 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 Value
Caliper, face		2.1 mil (53 microns)
Caliper, adhesive		1.0 mil (25 µm)
Dimensional stability		<0.015"(0.4 mm)
Tensile at Yield		4.0 - 8.0 lb/in (0.7 - 1.5 kg/cm)
Elongation		100% min.
Gloss	Hunter Gloss @ 60 degrees	26 GU
Adhesion:	Polycarbonate 24 hr 4.5 lbs/in (788 N/m) 1 week 4.6 lbs/in (805 N/m) Signtech® Flexface FX 24 hr 2.2 lbs/in (385 N/m) 1 week 3.0 lbs/in (525 N/m)	
Flammability	FMVSS302	Self Extinguishing
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	Vertical Exposure	5 years
Min. Application Temperature		40° F (4° C)
Service Temperature		-20° to 175°F (-29° to 79° C) (Reasonable range of temperatures which would be expected under normal environmental conditions).
Chemical resistance		Resistant to most mild acids, alkalis, and salt solutions

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Data represents average values where applicable, and is not intended for specification purposes.

Warranty:

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Related Documents:

The following Avery Dennison literature will provide necessary 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
Durability of Films	Instructional Bulletin # 1.30
Converting Tips for Sign Films	Instructional Bulletin # 2.10
Applying Translucent Films to Flex Face	Instructional Bulletin # 4.01

Colors & Expected Durability

Vertical Durability for Zone 1 vertical applications is noted in the chart below. Color samples are available from samples.graphics@averydennison.com, or through your sales or customer service contact. Reference Instructional Bulletin 1.30 for zones by geographic location.

NOTE: Some color fade may occur in severe environmental areas. Reference [IB 1.30](#) for durability guidelines.

Colors Cross Reference - Opaque:

UC900 Series Name	Vertical Durability Zone 1 Years
UC900-147-S White 30% Diffuser	5
UC900-148-S White 60% Diffuser	5

NOTE: Some color fade may occur in severe environmental areas. Reference IB 1.30 for durability guidelines.

Special Considerations:

Because of the unique properties and varieties of glass, special considerations must be considered for windows and graphic applications. Avery Dennison accepts no liability for glass breakage.

- Glass absorbs heat when exposed to sunlight. The degree of absorption across windows can vary because of shading, heating, and cooling ventilation, and insulation from window frames. These temperature differences across the window produce stress, which can cause glass breakage. The ability of glass to resist breakage because of temperature stress is affected by window size, glass thickness, glass treatments, quality, and design.
- Window cleaning methods also vary, from the type of cleaners used, to the washing methods employed. Specific chemicals used in window cleaners may affect the adhesion of pressure-sensitive graphics. Power washing methods may impact the adhesion of graphics, if the water pressure or temperature exceeds the graphics adhesion capability.

Revisions are italicized

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