

Avery Dennison[®] UC 900 Ultimate Cast Series

White Diffuser – Permanent – Kraft
(formerly: A5000 Series Diffuser Films)
Revision: 1 Dated: 11/18/13

Uses:

Avery Dennison[®] UC 900 Diffuser Films are premium quality cast films which are specially designed for graphic applications involving illuminated light box applications. Avery Dennison[®] UC 900 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



Durability: 5 years

**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
- Flat Bed Sign-Cut
- Drum Roller Sign-Cut
- Steel Rule Die-Cutting

Common Applications:

- Architectural Signage
- Directional Signage
- Backlit Rigid Signs
- Flexible Sign faces
- Outdoor advertising

Product Data Sheet

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Graphics and
Reflective Solutions

averygraphics.com
AnswerLine: 800-231-4654

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Physical Characteristics:

| Property | | Value |
|------------------------------|-------------------|--|
| Caliper, face | | 2.1 mil (53 µm) |
| Caliper, adhesive | | 1.0mil (25 µm) |
| Dimensional stability | | <0.0015"(0.4mm) |
| Tensile at Yield | | 4.0 - 8.0 lb/in (0.7–1.5 kg/cm) |
| Elongation | | 100% min. |
| Gloss | | matte |
| Adhesion: | 24 hr. | 4.5 lbs/in (788 N/m) |
| Polycarbonate | 1 week | 4.6 lbs/in (805 N/m) |
| Signtech® | 24 hr. | 4.3 lbs/in (753 N/m) |
| Flexface FX | 1 week | 4.6 lbs/in (805 N/m) |
| Flammability | | Self Extinguishing |
| Shelf-Life | | <i>2 years from date on label (up to 2 years unprocessed, OR process within one year and apply within 1 year of processing)</i> |
| Durability | Vertical Exposure | 5 years |
| Min. Application Temperature | | 40° F (4° C) |
| Service Temperature | | -20° - 175°F (-29° - 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. |

Important:

Information on physical and chemical characteristics are based on tests believed to be reliable. The values are intended only as a source of information. This information is given without guaranty and do not constitute a warranty. The purchaser should independently determine, prior to use, the suitability of any material for their specific purpose. (Data represents average values where applicable, and is not intended for specification purposes)

Warranty:

All statements, technical information 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 with the understanding that Purchaser has independently determined the suitability of such products for its purposes. Avery Dennison products are warranted to be free from defects in material and workmanship for either *two years* (or the period stated on the specific product information literature in effect at time of delivery, if longer) from date of shipment if said product is properly stored and applied. 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 to repair or replacement of defective product without charge at Avery Dennison's plant or at the location of product (at Avery Dennison's election), or in the event replacement or repairs is not commercially practical, to Avery Dennison's issuing Purchaser a credit reasonable in light of the defect in the product.

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.

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Colors: Cross Reference

| SPECIALTY SERIES - 90# | AVERY DENNISON 100 SPECIALTY FILMS PERMANENT KRAFT | SPECIALTY SERIES - 90# | AVERY DENNISON 100 SPECIALTY FILMS PERMANENT KRAFT |
|----------------------------|--|----------------------------|--|
| A5847-S White 30% Diffuser | UC 900-147-S White 30% Diffuser | A5848-S White 60% Diffuser | UC 900-148-S White 60% Diffuser |

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

Dimensional stability:

Is measured on a 6" x 6" (150 x 150 mm) aluminum panel to which a specimen has been applied; 72 hours after application the panel is scored in a cross pattern, exposed for 48 hours to 150°F (65°C), after which the shrinkage is measured.

Adhesion:

(FTM-1, FINAT) is measured by peeling a specimen at a 180° angle from a stainless steel panel, 24 hours after the specimen has been applied under standardized conditions. Initial adhesion is measured 15 minutes after application of the specimen.

Flammability:

A specimen applied to aluminum is subjected to the flame of a gas burner for 15 seconds. The film should stop burning within 15 seconds after removal from the flame.

Temperature range:

A specimen applied to stainless steel is exposed at high and low temperatures and brought back to room temperature. 1 hour after exposure the specimen is examined for any deterioration. Note: Prolonged exposure to high and low temperatures in the presence of chemicals such as solvents, acids, dyes, etc. may eventually cause deterioration.

Chemical Resistance:

All chemical tests are conducted with test panels to which a specimen has been applied. 72 hours after application the panels are immersed in the test fluid for the given test period. 1 hour after removing the panel from the fluid, the specimen is examined for any deterioration.

Revisions are italicized

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