

Avery® Light Diffuser Films

Features

- Excellent colour fastness, durability and outdoor performance
- Effective light control and diffusion without hotspots
- Compatible with a wide range of rigid and flexible sign substrates
- Excellent conversion properties on computerised cutters
- Easy cutting and weeding
- Excellent dimensional stability
- Eliminates the need for backspraying

Conversion

- | | |
|--|--|
| <input checked="" type="checkbox"/> Flat bed cutters | <input type="checkbox"/> Cold overlaminating |
| <input checked="" type="checkbox"/> Friction fed cutters | <input type="checkbox"/> Estat printing |
| <input checked="" type="checkbox"/> Die cutting | <input type="checkbox"/> Water based inkjet |
| <input type="checkbox"/> Thermal transfer | <input type="checkbox"/> Solvent inkjet |
| <input checked="" type="checkbox"/> Screen printing | <input type="checkbox"/> Mild solvent inkjet |

Uses

Avery Light Cast Diffuser films is designed for use in internally illuminated signage and awning applications where even light control is required. Avery diffuser films eliminate the need for backspraying and offers uniform colour under both transmitted and reflected light conditions without unsightly hotspots.

Description



Film: 50 micron cast vinyl diffuser



Adhesive: Permanent acrylic



Backing: one side coated Kraft



Outdoor life: Up to 5 years in Australia/NZ



Colours:
A5 847-S- 30% light transmission
A5 848-S- 60% light transmission

Common Applications

- Internally illuminated signs
- Architectural signage
- Window graphics

Physical characteristics

General

Caliper, facefilm	ISO 534	50 micron
Caliper, facefilm & adhesive	ISO 534	75 micron
Dimensional stability	DIN 30646	0.2 mm max
Elongation	DIN 53455	100% minimum
Adhesion, initial	FINAT FTM-1	70% of ultimate values
Adhesion, ultimate	FINAT FTM-1, PMMA Polycarbonate	770 N/m 770 N/m
Flammability		Self extinguishing
Shelf life	Stored at 22° C/50-55 % RH	1 year
Durability**	Vertical exposure	up to 5 years

Thermal

Application temperature	Minimum: + 4°C
Temperature range	- 7°C to + 79°C

Important

Information on physical 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 any material for their specific use.

All technical data is subject to change without prior notice.

Warranty

Avery® 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 guarantee, warranty, or make any representation contrary to the foregoing.

All Avery® materials are sold subject to the above conditions, being part of our standard conditions of sale, a copy of which is available on request.

**Durability

The durability is based on Australian 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 north; in areas of long high temperature exposure such as northern Australia; in industrially polluted areas or high altitudes, exterior performance will be decreased.

***Information unavailable at time of printing.

Test Methods

Dimensional stability:

Is measured on a 150 x 150 mm aluminium panel to which a specimen has been applied; 72 hours after application the panel is exposed for 48 hours to + 70°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 or float glass panel, 24 hours after the specimen has been applied under standardised conditions. Initial adhesion is measured 20 minutes after application of the specimen.

Flammability:

A specimen applied to aluminium 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.

Corrosion Resistance:

A specimen applied to aluminium is exposed to saline mist (5% salt) at 35°C. After exposure, the film is removed and the panel is examined for traces of corrosion.