Avery Dennison® Etchmark
UC 900-861-W Etchmark (Ultimate Cast Vinyl)
(Formerly: A5861-S Etchmark)

Features
- Brilliant visual acid etched effect
- Excellent conversion properties on computerised cutters
- Easy cutting and weeding
- Outstanding durability and outdoor life
- Excellent dimensional stability
- Excellent UV, temperature, humidity and salt-spray resistance
- Excellent adhesion

Common Applications
- Window graphics
- Architectural signage

Description
- **Film**: 53 micron cast vinyl film with etched effect
- **Adhesive**: Permanent acrylic
- **Backing**: One side coated bleached Kraft paper, 125gsm
- **Outdoor life**: Up to 5 years on the outside of external windows
- **Indoor life**: Up to 5 years on the inside of external windows
- Up to 9 years on internal partitions and windows

Conversion
- Flat bed cutters
- Friction fed cutters
- Die cutting
- Thermal transfer
- Screen printing

- Cold overlaminating
- Estat printing
- Water based inkjet
- Solvent inkjet
- UV Cured inkjet

Custom Colours
A fast colour matching service is offered for projects where specific colours are required. A minimum order quantity of approx 1100m² is required.

Uses
Avery Dennison Etchmark is designed to create the image of frosted decorations on glass without the use or extra cost of etching chemicals, or sand blasting and is also suitable for functional and manifestation graphics. Avery Dennison Etchmark can be applied to flat surfaces and produces best results when applied to transparent substrates such as glass, acrylic sheeting, and polycarbonate.
General

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calliper, face film</td>
<td>ISO 534</td>
<td>53 micron</td>
</tr>
<tr>
<td>Calliper, face film &amp; adhesive</td>
<td>ISO 534</td>
<td>78 micron</td>
</tr>
<tr>
<td>Dimensional stability</td>
<td>DIN 30646</td>
<td>0.4 mm max</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>DIN 53455</td>
<td>0.7 to 1.6 kg/cm</td>
</tr>
<tr>
<td>Elongation</td>
<td>DIN 53455</td>
<td>100% min</td>
</tr>
<tr>
<td>Gloss</td>
<td>ISO 2813, 20°</td>
<td>15-30%</td>
</tr>
<tr>
<td>Light Transmission</td>
<td></td>
<td>≥70%</td>
</tr>
<tr>
<td>Adhesion, initial</td>
<td>FINAT FTM-1, stainless steel</td>
<td>438 N/m</td>
</tr>
<tr>
<td>Adhesion, ultimate</td>
<td>FINAT FTM-1, stainless steel</td>
<td>630 N/m</td>
</tr>
<tr>
<td>Flammability</td>
<td></td>
<td>Self extinguishing</td>
</tr>
<tr>
<td>Shelf life</td>
<td>Stored at 22°C/50-55% RH</td>
<td>2 years</td>
</tr>
<tr>
<td>Durability **</td>
<td>Vertical exposure</td>
<td>up to 5 years outdoor</td>
</tr>
</tbody>
</table>

Thermal

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application temperature</td>
<td>Minimum: +4°C</td>
<td></td>
</tr>
<tr>
<td>Temperature range</td>
<td>-46°C to +82°C</td>
<td></td>
</tr>
</tbody>
</table>

Chemical

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humidity resistance</td>
<td>200 hours exposure</td>
<td>No effect</td>
</tr>
<tr>
<td>Corrosion resistance</td>
<td>120 hours exposure</td>
<td>No contribution to corrosion</td>
</tr>
<tr>
<td>Water resistance</td>
<td>48 hours immersion time</td>
<td>No effect</td>
</tr>
<tr>
<td>Sea water resistance</td>
<td>1 year half tide immersion BS5609:1978</td>
<td>No effect</td>
</tr>
</tbody>
</table>

Test Methods

**Dimensional stability:**
Is measured on a 150 x 150 mm aluminum 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 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: Protracted 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 aluminum 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.

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

**Durability**

Durability is based on exposure conditions in the normal middle European and central North American regions. 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 the southern hemisphere or south in the northern hemisphere; in areas of long high temperature exposure such as northern Australia; in industrially polluted areas or high altitudes, exterior performance will be decreased. Please refer to Avery Dennison Instructional Bulletin 1.3 for definitions and reductions based on the ‘Zone System’.

**Information unavailable at time of printing.**