Avery Dennison® 400 Ultra Removable
Gloss White Calendered Kraft

Features
• Unique ultra removable adhesive provides clean removability with no adhesive residue from most substrates for up to 1 year
• Good sheet stability and layflatness
• Excellent printability, conversion and application characteristics
• High gloss for superior appearance
• Good dimensional stability during use
• Up to 2 year outdoor durability
• Good UV, humidity and saltspray resistance

Description
- **Film**: 100 micron gloss white monomeric calendered vinyl
- **Adhesive**: Ultra removable acrylic
- **Removability**: up to 1 year
- **Backing**: One side coated 140gsm, Kraft paper
- **Outdoor life**: up to 2 years (unprinted)

Conversion
- Flat bed cutters
- Friction fed cutters
- Die cutting
- Thermal transfer
- Screen printing
- Cold overlaminating
- Estat printing
- Water based inkjet
- Solvent inkjet
- Mild solvent inkjet

Common Applications
- Window graphics
- Point of purchase
- Outdoor advertising
- Indoor advertising
- Exhibition graphics

Uses
Avery Dennison 400 Gloss White Ultra Removable offers good layflatness and is suitable for a wide range of short term indoor and outdoor promotional decals where clean and easy removability is required. This product meets the European regulations for toys and appliances (EN71-3). 400 Gloss White Ultra Removable is also an excellent, cost effective alternative to static cling films.
Avery Dennison® 400 Ultra Removable

**Physical characteristics**

### General
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caliper, facefilm</td>
<td>ISO 534</td>
</tr>
<tr>
<td>Caliper, facefilm &amp; adhesive</td>
<td>ISO 534</td>
</tr>
<tr>
<td>Dimensional stability</td>
<td>DIN 30646</td>
</tr>
<tr>
<td>Gloss</td>
<td>ISO 2813, 20°</td>
</tr>
<tr>
<td>Adhesion, initial</td>
<td>FINAT FTM-1, stainless steel</td>
</tr>
<tr>
<td>Adhesion, ultimate</td>
<td>FINAT FTM-1, stainless steel</td>
</tr>
<tr>
<td>Removability</td>
<td>up to 1 year</td>
</tr>
<tr>
<td>Flammability</td>
<td>Self extinguishing</td>
</tr>
<tr>
<td>Shelf life</td>
<td>Stored at 22°C/50-55 % RH</td>
</tr>
<tr>
<td>Durability **</td>
<td>Vertical exposure</td>
</tr>
</tbody>
</table>

### Thermal

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application temperature</td>
<td>Minimum: + 0°C</td>
</tr>
<tr>
<td>Temperature range</td>
<td>-40°C to + 100°C</td>
</tr>
</tbody>
</table>

### Chemical

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humidity resistance</td>
<td>120 hours exposure</td>
</tr>
<tr>
<td>Corrosion resistance</td>
<td>120 hours exposure</td>
</tr>
<tr>
<td>Water resistance</td>
<td>48 hours immersion time</td>
</tr>
<tr>
<td>Sea water resistance</td>
<td>1 year half tide immersion BS 5609:1986</td>
</tr>
<tr>
<td>Solvent resistance</td>
<td>Applied to aluminium and exposed to oils, greases, aliphatic solvents, motor oils, heptane, kerosene and JP-4 fuel</td>
</tr>
</tbody>
</table>

### 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 are 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'.

### 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% sal) at 35°C. After exposure, the film is removed and the panel is examined for traces of corrosion.

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