Tamper Indicating "Non-transferable" Gloss Silver Polyester Label Stock 7384

Product Data Sheet

Updated : April 2004
Supersedes : July 2000

Description :
Tamper indicating - Designed to provide a VOID message in the facestock when removal is attempted.

The compact format of the VOID message permits manufacture of small labels 12.5mm X 32mm

"Hi-Strength" Acrylic Adhesive for high bond to most surfaces. Compatibility must be determined.

Durable polyester facestock for harsh environments

90g/m2 Densified Kraft liner for consistent die cutting

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Facestock</th>
<th>51 micron (2.0 thou) Gloss Silver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesive</td>
<td>25 micron (1.0 thou) #300 Hi-Strength Acrylic</td>
<td></td>
</tr>
<tr>
<td>Liner</td>
<td>81 micron (3.2 thou) 90g/m2 (55#) Densified Kraft</td>
<td></td>
</tr>
<tr>
<td>Shelf Life</td>
<td>24 months from date of manufacture when properly stored at 22°C (72°F) &amp; 50% Relative Humidity</td>
<td></td>
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</tbody>
</table>

Physical Properties
Not for specification purposes
(Calipers are nominal values)

Adhesion
Suitable for application to a variety of clean* surfaces.

Stainless Steel
ABS
Polypropylene
Glass
Polycarbonate
Painted Metal
Polyester
HDPE
Nylon
Date: April 2004
Tamper Indicating "Non-Transferable" Gloss Silver
Polyester Label Stock 7384

*Assume all surfaces to which 3M 7384 will be applied are contaminated therefore surfaces must be cleaned prior to application by solvent wiping. Any surface contaminant will adversely affect adhesion and the destruct message.

**Solvent Wiping:**
A. Wet the application surface with a mild solvent such as isopropyl alcohol (rubbing alcohol) or heptane and wipe thoroughly.
B. Dry the surface with a lint free cloth before the solvent evaporates from the surface

**CAUTION:** Consult the manufacturers Material Safety Data Sheet for proper handling and storage of solvents.

**Application Pressure:**
Sufficient application pressure and dwell time is required to develop adhesion to assure VOID message appears both on the facestock and the substrate upon removal or upon attempted removal through tampering. Higher initial bonds can be achieved through increased application pressure such as firm hand or squeegee pressure.

**Dwell Time:**
24hrs room temperature 72°F (22°C) before testing

**Conformability**
Semi-rigid, suitable for flat or slightly curved surfaces

<table>
<thead>
<tr>
<th>Liner Release</th>
<th>Gr./in.</th>
<th>N/100mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>180° angle</td>
<td>25 max</td>
<td>0.96</td>
</tr>
<tr>
<td>90°/minute</td>
<td></td>
<td></td>
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</tbody>
</table>

**Environmental Performance**

Properties defined are based on the adhesion of the label stock to a stainless steel test surface.

**Chemical Resistance:**
Bond is secure when exposed to the following:
- **Gasoline** 1 hour at room conditions.
- **Auto Oil** 72 hours at 49°C (120°F)
- **Weak Alkali** 4 hours at room conditions.
- **Weak Acid** 4 hours at room conditions.
- **MEK** 1 hour at room conditions.
- **Freon TF** 1 Hour at room conditions.
- **NaCl Solution** 72 hours at room conditions

**Water Resistance:**
Withstands exposure to water at room temperature for 72 hours

**Temperature Resistance:**
Withstands exposure from – 40°C (-40°F) to 121°C (250°F)

**Humidity Resistance:**
Withstands exposure to 32°C (95°F) and 95% R.H. for 168 hours.

**Applications**
Non transferable labels for automotive, appliance and electronic industries
Tamper indicating labels and seals for medical and pharmaceutical industries
### Processing

3M 7384 is top coated to accept standard Flexo and Letterpress inks. This product is designed for processing on a roll fed rotary press. It is die cuttable with standard rotary die designed to cut polyester facestocks.

### Special Considerations

Care should be taken not to disturb the tamper-indicating feature by pre-destructing the VOID message when manually removing the label from the liner. Slowly remove the liner from the label at a 90° angle.

The tamper-indicating mechanism (i.e. the VOID message both on the facestock and on the substrate) for 3M 7384 depends upon adequate adhesion of the label to the substrate. A sufficient bond may not develop on all surfaces due to low surface energy or contaminated surfaces (mould release). Therefore, it is important to determine the suitability of 3M 7384 in the intended application by carefully pre-testing before the application process has begun.

The compact VOID message permits manufacture of labels as small as 12mm x 32mm.

The primary function of 3M 7384 Label Stock is to effect a non-transferable (non reusable) label or seal by causing the VOID messages to appear on the facestock surface when removal is attempted.

As a result of the primary function described above a VOID message is also transferred to the application surface. This message is a secondary rather than permanent indication of tampering since the VOID message transferred to the application surface can be removed by rubbing or by solvent wiping.

Caution should be exercised to avoid covering the surface of the label with opaque graphics to the extent that the VOID message is hidden by the graphics and the effectiveness of the label or seal is lessened.

Every slit roll has been tested for the presence of the VOID message. The leading edge of very slit roll is tabbed with a 38mm strip to simulate tampering, thereby indicating that the VOID message is functional on the leading edge of that roll.

This 3M label stock properly used is designed to provide significant end user notice through the tamper-indicating feature built into the label stock construction. 3M does not guarantee the label stock to be 100% tamper proof. We encourage you to test the degree of security provided by this 3M label stock in your end use application to ensure suitability for your application. Based upon 3M's years of market experience we will be pleased to consult with you on the selection of the best 3M label stock material for your application. Final determination of suitability for the end use application rests with the converter and the converter's customers.
Special Considerations

It is recommended that the converter test for the presence of the VOID message on every roll of labels or seals as the converter processes them, to ensure the product quality and consistency. This can be done by laminating a label or seal to an untreated polyester film test surface. The label or seal should be wiped down with a squeegee, allowed to dwell 10 minutes and then be removed to observe the presence and function of the VOID message on both the facestock and the substrate. It is also recommended that the converter test each lot of labels or seals on the actual application surface to assure the function of the VOID message.

It is recommended that the end user test samples from each roll of labels or seals received from the converter. This should be done by laminating a representative label or seal to the specific application surface to assure its function meets expectations. This test can be run after 10 minutes dwell; however, final judgement should be based on 72 hours dwell at room temperature prior to testing.

Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.