Scotch™
Double Linered Laminating Adhesive 7952

Product Data Sheet

Updated : July 2000
Supersedes : December 1994

Physical Properties
Not for specification purposes

<table>
<thead>
<tr>
<th>Release Liner 1</th>
<th>0.10mm 58# Polycoated Kraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesive</td>
<td>0.05mm #200 ”Hi-Performance” Acrylic</td>
</tr>
<tr>
<td>Liner 2</td>
<td>0.05mm 58# Polycoated Kraft</td>
</tr>
<tr>
<td>Shelf Life</td>
<td>24 months from date of manufacture when stored in cartons at 70°F at 50% relative humidity.</td>
</tr>
</tbody>
</table>

Features:

- Long term environmentally stable bond.
- Smooth adhesive for high quality appearance on thin graphic overlays.
- High cohesive strength to withstand repeated stresses from switch activation.
- High temperature, humidity, and chemical resistance.

Applications

- Attachment of graphic overlay to membrane switch or keyboard.
- Attachment of membrane switch to product housing.
- Lamination to polyester for membrane spacers.
## Properties and Performance

(Not for specification purposes)

| Temperature Range | Low : -40°F (-40°C)  
| High Long Term (days/weeks) : 300°F (149°C)  
| High Short Term (minutes/hours) : 400°F (204°C) |

### Chemical Resistance
Solvent resistance is excellent when this product is properly applied to impervious materials. The adhesive resists softening through edge contact with mild acids, alkalis, oil, gasoline, Kerosene, JP-4 fuel and many other solvents.

Not recommended for total immersion.

### Dielectric Strength
(ASTM D149)
0.7 KV/mil

### Insulation Resistance
(ASTM P257)
N.A. ohms

### Volume Resistivity
(ASTM D257)
1.8 x 10^{15} ohm-cm

### Surface Resistivity
(ASTM D257)
5.9 x 10^{14} ohms/square

### Moisture & Humidity Resistance
No adverse effect on the bond after exposure to 100% Relative Humidity at 100°F.

### Bond Build Up
The bond strength of Scotch #200 Hi-Performance Acrylic adhesive increases as a function of time and temperature.

### U.V. Resistance
Adhesive is very resistant to oxidisation and ozone when exposed to air or sunlight (U.V.).

## Adhesen Properties

Not for specification purposes

| ASTM D903 180° peel 12/minute 1 mil polyester to stainless steel |
| N/ 10mm | 9.6 |

3M test 90° peel 12/Minute 8 mil aluminium to various surfaces

<table>
<thead>
<tr>
<th>72 hour Dwell N/10mm</th>
<th>Ultimate Bond N/10mm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stainless Steel</strong></td>
<td>14.4</td>
</tr>
<tr>
<td><strong>Epoxy</strong></td>
<td>14.6</td>
</tr>
<tr>
<td><strong>Polyester</strong></td>
<td>13.4</td>
</tr>
<tr>
<td><strong>Polycarbonate</strong></td>
<td>15.4</td>
</tr>
<tr>
<td><strong>ABS</strong></td>
<td>12.6</td>
</tr>
</tbody>
</table>
Application Techniques

• Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure develops better adhesive contact and thus improves bond strength.

• To obtain optimum adhesion, the bonding surfaces must be clean, dry and smooth. Some typical surface cleaning solvents are isopropyl alcohol or heptane. Observe proper safety precautions when handling solvents.