PRODUCT DESCRIPTION
DuPont™ PE971 is a stretchable Ag/AgCl conductor paste for printed low-voltage circuitry on elastic film and textile substrates. It is compatible with polyurethane (TPU) film and select synthetic fabrics.

PRODUCT BENEFITS
• Stretchable Ag/AgCl conductor
• Compatible with wide variety of fabric and film substrates
• Compatible with lamination
• Dry contact Bio-potential electrode

PROCESSING
Screen Printing Equipment
• Automatic reel-to-reel
• Semi-automatic flat-bed
• Rotary screen/cylinder screen

Substrates
• Select synthetic fabrics
• Coated fabrics & membranes
• Thermoplastic polyurethane films

Screens
• 325 – 200 Wire/inch stainless steel mesh
• 120 – 77 Thread/cm polyester mesh

Curing
Dry at 110 – 140°C for 2 – 10 minutes in a well-ventilated oven or conveyor dryer, where the exhaust meets environmental regulations. Drying efficiency and good print quality/thickness control help ensure best electrical and physical performance.

Table 1-Typical Composition Properties

<table>
<thead>
<tr>
<th>Test</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids (%) @ 150°C</td>
<td>71.0-75.0</td>
</tr>
<tr>
<td>Viscosity (PaS) [Brookfield 0.5 x RVT, #14 Spindle, 10 RPM, 25°C]</td>
<td>15-40</td>
</tr>
<tr>
<td>Density (g/cc)</td>
<td>2.8</td>
</tr>
<tr>
<td>Ag:Ag/Cl ratio</td>
<td>80/20</td>
</tr>
<tr>
<td>Thinner</td>
<td>DuPont™ 3610</td>
</tr>
<tr>
<td>Shelf Life (months)</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 2-Typical Physical Properties

<table>
<thead>
<tr>
<th>Test</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Hatch Adhesion (B) ASTM standard?</td>
<td>4-5</td>
</tr>
<tr>
<td>Resistivity</td>
<td>100 mohm/sq/mil</td>
</tr>
<tr>
<td>Coverage(cm²/g)</td>
<td>~200</td>
</tr>
</tbody>
</table>

STORAGE AND SHELF LIFE
Containers should be stored, tightly sealed, in a clean, stable environment at room temperature (<25°C). Shelf life of material in unopened containers is six months from date of shipment. Some settling of solids may occur and compositions should be thoroughly mixed prior to use.

SUBSTRATE TYPES
PE971 is appropriate for many types of thermally-stable substrates in wearable electronics applications. Due to the diverse nature of potential fabrics and films that could be considered, it is not always possible to provide detailed performance guidance. For more information, please call your local DuPont representative.

SAFETY AND HANDLING
Please inform the DuPont product supplier if you intend to test PE971 alone or in combination with other materials, on human skin. For Safety and Handling information pertaining to this product, read the Material Safety Data Sheet (MSDS).
DUPONT™ PE971 STRETCHABLE SILVER/SILVER CHLORIDE CONDUCTOR

FOR MORE INFORMATION ON DUPONT™ PE971 OR OTHER DUPONT MICROCIRCUIT MATERIALS PRODUCTS, PLEASE CONTACT YOUR LOCAL REPRESENTATIVE:

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