**PRODUCT DESCRIPTION**
DuPont™ 5065 silver conductor was developed for the Printed Electronics market and is particularly well suited for RFID applications where low as-printed resistance is a requirement. This product uses a unique combination of Ag powder and resin technology providing superior conductivity and performance. This composition is solvent-based and was designed to be screen printed in semi-automatic or high volume reel-to-reel applications.

**PRODUCT BENEFITS**
- Good printability
- Superior RFID performance in UHF and HF range (with low and high track thickness respectively)
- Outstanding electrical conductivity
- High paste coverage
- Excellent adhesion to various substrates

**PROCESSING**
**Screen Printing Equipment**
Reel-to-reel, semi-automatic, manual

**Substrates**
Polyester, paper, card

**Screen Type**
Polyester, stainless steel

**Typical Drying Conditions**
Static box oven: 130°C/10 min
Reel-to-reel: 140°C/2 min

**Typical Circuit Line Thickness**
Printed with 200mesh polyester screen: 10-12 μm

**Clean-Up Solvent**
Ethylene diacetate or Methyl propasol acetate

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**Table 1-Composition Properties**

<table>
<thead>
<tr>
<th>Test</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids, (%)</td>
<td>68 - 71</td>
</tr>
<tr>
<td>Viscosity, (Pa.s) [0.5xRVT, spindle#14, 10rpm]</td>
<td>12 - 27</td>
</tr>
<tr>
<td>Thinner</td>
<td>DuPont™ 8260</td>
</tr>
<tr>
<td>Shelf Life (months)</td>
<td>6</td>
</tr>
</tbody>
</table>

**Table 2-Typical Physical Properties**
Printed on 125μm PET film

<table>
<thead>
<tr>
<th>Test</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resistivity (mΩ/sq/25μm)</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Coverage (cm²/g) [using screen type 200 mesh polyester]</td>
<td>170</td>
</tr>
<tr>
<td>Abrasion Resistance (H) [ASTM pencil hardness]</td>
<td>5</td>
</tr>
<tr>
<td>Adhesion (B) [ASTM x-hatch, no material removal]</td>
<td>5</td>
</tr>
</tbody>
</table>

Tables 1 and 2 show anticipated typical physical properties for DuPont™ 5065 based on specific controlled experiments in our labs and are not intended to represent the product specifications, details of which are available upon request.

**Drying**
Dry in a well-ventilated box oven or belt/conveyor furnace. Air flow and extraction rates should be optimized to ensure complete removal of solvent from the paste. A strong air flow may help to reduce the drying temperature/time considerably and to achieve the lowest as-printed resistance.
DUPONT™ 5065 SILVER CONDUCTOR

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.

SAFETY AND HANDLING
For Safety and Handling information pertaining to this product, read the Material Safety Data Sheet (MSDS).

FOR MORE INFORMATION ON DUPONT™ 5065 OR OTHER DUPONT MICROCIRCUIT MATERIALS, PLEASE CONTACT YOUR LOCAL REPRESENTATIVE:

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CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see “DuPont Medical Caution Statement,” H-50102-5 K-28888 (5/15)