Technical Data Sheet

**ASSEMBLY MATERIALS**

**Product Type:** Conductive Adhesive

**Product Name:** PC 3000

### Description

PC 3000 is a thermosetting, one-component, solvent-free, silver-filled epoxy conductive adhesive, designed for the connection of electronic (SMDs) and bare dies with LTCC and ceramic substrates.

### Key Benefits

- High electrical and thermal conductivity
- Very low degassing
- High reliability

### Compliant Products

- SMT Adhesive: PD 955 M

### Applications

- Printing

## Physical Properties

<table>
<thead>
<tr>
<th>Processing Life (h)</th>
<th>Curing Profile</th>
<th>Substrate and Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. 32</td>
<td>10 min / 150 °C</td>
<td>Substrate Materials: LTCC, Al₂O₃ – Ceramic, lead frames and flexible substrates</td>
</tr>
<tr>
<td></td>
<td>20 min / 120 °C</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adhesion (N/mm²)</th>
<th>Weight Loss during Curing Process at 150 °C (%)</th>
<th>Glass Transition Temperature (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard: DIN EN 1465</td>
<td>Max. 0.8</td>
<td>Approx. 41</td>
</tr>
<tr>
<td>Min. 8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thermal Conductivity (W/mK)</th>
<th>Volume Resistivity (mΩ.cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. 5</td>
<td>Max. 0.2</td>
</tr>
</tbody>
</table>

### Halogen Content

**Hydrolyse Halogen**

Tolerance: Halogen < 50 ppm

### Cleaning Instructions

The uncured adhesive can be removed with Zestron HC and other Zestron and Vigon cleaning materials. The cleaned parts must be completely dry before installing them in the machine. Defective components can be removed by heating the cured adhesive joint with hot air above 250°C. The hot remaining adhesive can be removed with a sharp tool.

### Adhesive Conditioning

- Remove adhesive from freezer: Before opening the package leave it for at least 2 hours at room temperature so that adhesive heats up
- Do not open jar/cartridge while adhesive is cold to prevent condensation
- Do not use faster defrost systems
- Before use of adhesive jar: To obtain uniform, stable viscosity stir adhesive for 1 to 2 min, using a stainless steel or chemically resistive plastic spatula
- Caution: When automatic stirring equipment is used, do not stir the adhesive for longer than 2 min. For further information see Handling Instructions
Storage

- Store the adhesive in tightly-sealed containers and avoid exposure to high humidity and sunlight
- Max. expiration date: Shelf life: Please refer to the expiry date on the label of the packaged product
- Storage condition in the freezer at – 40 °C