C4082 is a Pb and Cd free Ag/Pd/Pt formulation which provides outstanding leach resistance and aged adhesion with many types of solder. This material has excellent silver migration resistance. C4082 prints and holds 5 mil lines and spaces.

Key Benefits
- REACH\(^1\) and ROHS\(^2\) compliant
- Free of Pb and Cd
- Excellent Ag migration resistance
- High coverage
- Outstanding leach resistance

Typical Properties

**Resistivity**
\[ \leq 100 \text{ mOhm/sq} \] at 12 μm fired film thickness

**Adhesion**
- 80 x 80 mil pad
- SAC305 at 255 °C
- Initial: \[ \geq 5.0 \text{ lbs} \]
- 72 hours at 150 °C: \[ \geq 4.0 \text{ lbs} \]
- 500 hours at 150 °C: \[ \geq 4.0 \text{ lbs} \]

**Solderability**
- 80 x 80 mil pad
- SAC305, 5 second dip
- at 255 °C, RMA flux: \[ \geq 90 \% \] solder coverage

**Solder Leaching**

<table>
<thead>
<tr>
<th># of Dips</th>
<th>SAC305 at 255 °C, 4</th>
<th>RMA flux, 5 seconds dip</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Line Lost</td>
<td>(&lt; 5 %)</td>
<td>(&lt; 10 %)</td>
</tr>
</tbody>
</table>

**Viscosity**
- 150 – 250 Kcps, Brookfield HBT spindle #14 utility cup at 10 rpm, 25 °C

**Solids**
- 80.0 ± 1.0 %

Recommended Processing Guidelines

**Printing**
- 280 mesh stainless steel screen
- 0.5 mil emulsion

**Drying**
- 150 °C for 10 minutes

**Firing**
- 850 °C peak temperature
- Dwell time of 9 – 11 minutes

**Line Resolution**
- 5 mils (125 μm)

**Coverage**
- 80 – 90 cm\(^2\)/g at 30 – 35 μm wet film thickness

**Thickness**
- Wet: 30 – 35 μm
- Dried: 18 – 21 μm
- Fired: 10 – 15 μm

**Thinner**
- RV-372

**Warranty**
Material guaranteed to meet specifications for 6 months from date of shipment.

**Storage**
- Store in a dry location at 5 – 25 °C.
- DO NOT REFRIGERATE.
- Allow paste to come to room temperature prior to opening. Spatulate well before using, as settling may occur during storage.
Technical Data Sheet

Silver/ Palladium/ Platinum Conductor

Legend:

1) REACH compliant according to the latest ** Annex XIV to Regulation (EC) of the European Parliament and of the council on the Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") by European Chemicals Agency and its subsequent amendments; the material does not contain any substance listed in Annex XIV.

2) RoHS compliant according to the latest ** Directives (European Union) of Restriction of Hazardous Substances ("RoHS") and its subsequent amendments (including the exceptions related to Pb)

* See the data sheet issue date (DD/MM/YY) as reference of validity of latest edition which is available on request