**Product Name:** C4740S

**Product Type:** Conductors

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### Description

C4740S is a general purpose Ag/Pt conductor for use on alumina and BeO substrates. C4740S is suitable as a termination for all Heraeus air fireable resistor systems and also performs well as an inner layer conductor in multilayer applications. C4740S can be printed at speeds up to 12 inches per second and is capable of resolving fine lines as narrow as 5 mils.

### Key Benefits

- Outstanding adhesion to alumina and beryllium oxide substrates
- Excellent performance at high print speeds
- Excellent solderability
- REACH compliant

### Typical Properties

**Resistivity:**

≤ 2.9 mΩ at 14 µm fired film thickness

**Adhesion:**

80 x 80 mil pad Sn62/Pb36/Ag2 at 230 °C, RMA flux
- Initial: ≥ 5.0 lbs
- Aged: ≥ 3.0 lbs (48 hours @ 150 °C)

**Solderability:**

Sn62/Pb36/Ag2 at 225 °C,
RMA flux, 5 second dip
≥ 95 %

**Solder Leaching:**

Sn62/Pb36/Ag2 at 225 °C, RMA flux

<table>
<thead>
<tr>
<th>5 sec dips</th>
<th>% Line lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≤ 5 %</td>
</tr>
<tr>
<td>3</td>
<td>≤ 10 %</td>
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**Viscosity:**

90 – 140 Kcps Brookfield HBT
SC4 – 14 spindle, 6R utility cup at 10 rpm, 25 °C

**Solids:**

84.0 ± 2.0 %
The descriptions and engineering data shown here have been compiled by Heraeus using commonly accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for particular application.

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.