## Technical Data Sheet

**THICK FILM MATERIALS**

**Product Type:** Component Metallization  
**Product Name:** PC10904HV  

### Description

PC10904HV is a high performance silver conductor designed for metallizing ceramic component devices. The rheology of PC10904HV is optimized for dipping and spraying methods of application.

### Key Benefits

- REACH\(^1\) and ROHS\(^2\) compliant
- Excellent conductivity
- High adhesion to various oxide substrates
- Optimized for dipping and spraying applications

### Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resistivity:</strong></td>
<td>(&lt; 1.5 \text{ m} \Omega \text{cm}) at 25 (\mu\text{m}) fired film thickness</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td>8.5 – 9.5 Kcps Brookfield RVT Spindle #5, at 20 rpm, 25 °C</td>
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</table>
| **Solderability:**        | 3 seconds dip Sn62/Pb36/Ag2 at 200 °C  
  Excellent |
| **Solder Leaching:**      | Sn62/Pb36/Ag2 at 230 °C  
  \(< 50 \%\) loss |
| **Adhesion:**             | Sn62/Pb36/Ag2 at 200 °C  
  80 mil x 80 mil pad  
  Initial \(> 6.0\) lbs |

### Recommended Processing Guidelines

**Application:**  
The material should be thoroughly shaken before use. Apply the material by dipping or spraying.

**Drying:**  
125 – 150 °C for 5 – 10 minutes

**Firing:**  
850 – 925 °C peak temperature  
Dwell time 5 – 10 minutes

**Thinner**  
RV-404

**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.
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.

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