RS 199-1468
Epoxy Resin

RS 199-1468 is a general purpose, hot or cold curing resin with superior adhesive properties. The cured material is tough however flexibility can be adjusted by altering the amount of hardener used. Increasing the amount of hardener will produce a more flexible product and decreasing the amount of hardener will produce a more rigid product; testing is advised to find the right mix ratio for the application.

- Excellent adhesion to a wide variety of substrates
- Adjustable flexibility to suit a range of applications
- Excellent electrical properties

**Approvals**
RoHS-2 Compliant (2011/65/EU): Yes

**Typical Properties:**

**Liquid Properties:**
- Density Part A - Resin (g/ml) 1.16
- Density Part B - Hardener (g/ml) 0.97
- Part A Viscosity (mPa s 23°C) 11000
- Part B Viscosity (mPa s 23°C) 15000
- Mixed System Viscosity (mPa s 23°C) 12000
- Mix Ratio (Weight) 1:1
- Mix Ratio (Volume) 0.83:1
- Usable Life (20°C) 1-2 hours
- Gel Time (23°C) 4 hours
- Cure Time (23 °C) 48 hours
- Cure Time (100 °C) 1 hour
- Colour Part A - Resin Clear
- Colour Part B - Hardener Amber
- Storage Conditions Dry Conditions: Above 15°C, Below 30°C

**Cured System:**
- Cured Density (g/ml) 1.05
- Temperature Range (°C) -40 to +120
- Dielectric Strength (kV/mm) 12
- Volume Resistivity (ohm-cm) $10^{14}$
- Shore Hardness D80
- Colour (Mixed System) Clear Amber
- Flame Retardancy No
- Tensile Strength (MPa) 45-50
- Loss Tangent @ 50 Hz 0.01
- Permittivity @ 50 Hz 45

RS, Professionally Approved Products, gives you professional quality parts across all products categories. Our range has been testified by engineers as giving comparable quality to that of the leading brands without paying a premium price.
Tensile shear strength of bonded pickled light alloy:

<table>
<thead>
<tr>
<th>Mix Ratio (Resin:Hardener)</th>
<th>Cured 7 Days @ 25°C</th>
<th>Cured 20 mins @ 150°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0 : 1</td>
<td>170kg/cm²</td>
<td>300kg/cm²</td>
</tr>
<tr>
<td>1.5 : 1</td>
<td>180kg/cm²</td>
<td>310kg/cm²</td>
</tr>
<tr>
<td>1.0 : 1</td>
<td>180kg/cm²</td>
<td>350kg/cm²</td>
</tr>
<tr>
<td>0.67 : 1</td>
<td>150kg/cm²</td>
<td>300kg/cm²</td>
</tr>
</tbody>
</table>

**Mixing Procedures**

Please refer to the instruction leaflet included.

**Additional Information**

**Curing:** Do not heat cure large volumes immediately. Allow these to gel at room temperature and post-cure at high temperature if required (refer to liquid properties for details). Small volumes (250ml) may be heat cured immediately.

**Storage:** When storing under very cold conditions, the hardener may crystallise. If this occurs, simply warm (40°C) the container gently until all crystals have re-melted.

**Health & Safety:** Always refer to the Health & Safety data sheet before use.