CoolTherm® Materials
Motor Application

Heat robs a motor of power and shortens its life - CoolTherm® conductive epoxy and silicone encapsulants help manage that heat, which enables you to increase the power density and life of your motor. Our studies have shown a temperature decrease of up to 50°C or an increase in power output up to 30% when using our CoolTherm materials.

What’s the best solution for your application? We can help you select the correct material and optimize your process to improve performance and lower costs. With over 40 years of industry expertise and a full product portfolio available, we can help you stick to your schedule and stay on budget with CoolTherm solutions.

Contact Information:

Parker LORD
Engineered Materials Group
111 LORD Drive
Cary, NC 27511-7923
USA

phone +1 877 ASK LORD (275-5673)

www.lord.com

For a listing of our worldwide locations, visit LORD.com

Decrease operating temperature by up to 50°C or increase power output up to 30% when using CoolTherm materials.
Encapsulants:

Thermally connect your cells to the heat sink by encapsulating the entire pack and minimize design gaps by taking advantage of high dielectric strength.

- **Improve Performance:** Our encapsulants facilitate optimum heat transfer because of their high thermal conductivity and low viscosity.
- **Protect Electronics:** Potting and encapsulants provide protection from dust and moisture and can reduce vibration.
- **Reduce Component Stress:** Parker LORD encapsulants exhibit low shrinkage upon curing.

### ENCAPSULANTS

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>CHEMISTRY</th>
<th>THERMAL CONDUCTIVITY (W/m-K)</th>
<th>VISCOSITY (cP @25°C)</th>
<th>DENSITY (g/cm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CoolTherm® SC-305</td>
<td>Silicone</td>
<td>0.7</td>
<td>4,000</td>
<td>1.5</td>
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<tr>
<td>CoolTherm SC-309</td>
<td>Silicone</td>
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<td>3,600</td>
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<tr>
<td>CoolTherm EP-2000</td>
<td>Epoxy</td>
<td>1.9</td>
<td>1,900*</td>
<td>2.7</td>
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<tr>
<td>CoolTherm EP-3500</td>
<td>Epoxy</td>
<td>3.3</td>
<td>8,000*</td>
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</tbody>
</table>

*Viscosity cP @ 60°C

- **Two-Component**
- **Room Temperature and Heat Curing**
- **Electrically Isolative**