Better Battery Packs Made Possible with CoolTherm® Materials

Heat can be a real drain - As battery technologies evolve to have increased energy density, the ability to manage heat during charge and discharge cycles is crucial for optimizing performance. LORD CoolTherm® encapsulants, adhesives and gap fillers are fully customizable and compatible with cylindrical, pouch and prismatic battery cells. Our dedicated application engineers will work with you to ensure your project’s specific performance requirements, cost targets and deadlines are met quickly.

With CoolTherm tailored heat management solutions and our responsive technical experts at your fingertips, get ready to achieve a different kind of cool.

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: We have encapsulants that facilitate optimum heat transfer because of their high thermal conductivity and low viscosity.

Protect Electronics: Potting compounds provide protection from dust and moisture and can reduce vibration.

Reduce Component Stress: LORD encapsulants exhibit low shrinkage upon curing.

ADHESIVES
Formulated for standard MMD equipment, our adhesives provide your application with structural integrity. And, our thermally conductive adhesives not only provide mechanical rigidity but also a thermal connection where heat is a problem.

Improve Design Flexibility: No longer constrained by mechanical fixtures and given the ability to bond a wide variety of substrates, you are free to discover the possibilities.

Reduce Complexity: Reduce the need for fasteners, thereby simplifying your battery pack design.

GAP FILLERS
Get the best performance out of your batteries by filling in all of those nooks and crannies with a thermally conductive gap filler that was designed with electric vehicle applications in mind. They are a stay-in-place solution and cure as a gel, easing the stresses caused by thermal differences and flex.

Low Outgas Options: We offer low ppm siloxane solutions for sensitive electronic applications.

Protect Against Shock: Our gap fillers remain tacky and soft to dampen vibration.

CoolTherm solutions allow you to manage heat in your battery pack by providing a tailored solution for your cell type.

Pouch Battery Pack
Cylindrical Battery Pack
Prismatic Battery Pack

LORD CoolTherm®
A different kind of cool
### About LORD Corporation

LORD Corporation is a diversified technology and manufacturing company developing highly reliable adhesives, coatings, motion management devices, and sensing technologies that significantly reduce risk and improve product performance. For more than 90 years, LORD has worked in collaboration with our customers to provide innovative oil and gas, aerospace, defense, automotive and industrial solutions. With world headquarters in Cary, N.C., LORD has approximately 3,100 employees in 27 countries and operates 19 manufacturing facilities and 10 R&D centers worldwide. LORD actively promotes STEM education and many other community engagement initiatives. For more information, visit [http://www.lord.com](http://www.lord.com).

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#### Encapsulants

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>CHEMISTRY</th>
<th>THERMAL CONDUCTIVITY (W/mK)</th>
<th>VISCOSITY (cps @ 25°C)</th>
<th>DENSITY (g/cm³)</th>
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<tbody>
<tr>
<td>CoolTherm TC-2002</td>
<td>Acrylic</td>
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<td>Maxlok™ T6</td>
<td>Acrylic</td>
<td>—</td>
<td>19.3</td>
<td>1.6</td>
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<tr>
<td>LORD® 406</td>
<td>Acrylic</td>
<td>—</td>
<td>20.7</td>
<td>1.4</td>
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- Two-Component
- Bond a Wide Variety of Substrates
- Room Temperature Curing
- Variable Cure Speeds

#### Adhesives

<table>
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<tr>
<th>PRODUCT</th>
<th>CHEMISTRY</th>
<th>THERMAL CONDUCTIVITY (W/mK)</th>
<th>LAP SHEAR STRENGTH (MPa)</th>
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<tbody>
<tr>
<td>CoolTherm SC-305</td>
<td>Silicone</td>
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<tr>
<td>CoolTherm SC-315</td>
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<td>CoolTherm SC-252</td>
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<td>CoolTherm SC-320</td>
<td>Silicone</td>
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<td>CoolTherm SC-324</td>
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- Two-Component
- Room Temperature Curing
- Electrically Isolative
- 1:1 Mix Ratio

#### Gap Fillers

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>CHEMISTRY</th>
<th>THERMAL CONDUCTIVITY (W/mK)</th>
<th>SHORE HARDNESS (OO)</th>
<th>DENSITY (g/cm³)</th>
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<tbody>
<tr>
<td>CoolTherm SC-1200</td>
<td>Silicone</td>
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<td>CoolTherm SC-1500</td>
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- Two-Component
- Low Outgas Options
- Room Temperature Curing
- Electrically Isolative
- Standard MMD Equipment
- 1:1 Mix Ratio

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For more information about our Thermal Management Materials...

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