Daikin High Performance Electrolyte

Capabilities
Daikin high performance electrolytes are a family of solutions designed to meet the demands of next generation lithium ion batteries (LiB’s).
Utilizing Daikin patented fluorinated chemistries, these electrolyte solutions address key performance issues of interest to battery manufacturers.
Specifically Daikin electrolyte solutions can improve the safety, life cycle, high temperature and high voltage performance of lithium ion batteries used in transportation, utility grid, industrial, and personal communication applications.

Daikin electrolyte solutions are compatible with and can enhance the performance of cathode systems based in NMC, LMO, NCA and LFP and anode systems based on natural graphite, hard carbon and silicone. All Daikin electrolytes use lithium hexafluorophosphate (LiPF$_6$) as the electrolyte salt.

Features
- Patented chemistries vital to LiB developments
- Most diversified fluorine based chemistry in the world
- Flexible blending and manufacturing capabilities
- R&D capabilities in North America and Asia

Benefits
- Critical for improved safety, life cycle, and achieving higher voltages
- Can address the needs of all unique cathode & anode technologies
- Custom formulations and small lot capabilities help any LiB manufacturer
- Technical support available globally to address any unique formulation requests

Daikin ... Doing More with Less
Lithium Ion Battery Enhancements with Daikin Electrolyte Solutions

<table>
<thead>
<tr>
<th>Daikin Electrolyte Solutions</th>
<th>Improved Safety</th>
<th>Improved Life Cycle</th>
<th>Higher Voltages</th>
<th>Higher Energy Densities</th>
<th>Low Temperature Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Manufacturing Capabilities

As noted in our January 2011 press release, Daikin high performance electrolyte solutions will be manufactured in a new, state of the art facility located in our large plant complex in Decatur, Alabama. As of February, 2011, lab quantities of customized electrolyte solution are available for sampling. Electrolyte can be supplied in up to 20kg samples.

Pilot scale capacity, capable of delivering individual canister samples up to 200kg will be online in early 2012. Commercial scale manufacturing will be available in 2013.

Daikin electrolyte solutions are available for sampling in up 20kg. quantities.