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Soucy Baron |  

Rubber to the rescue for a major EV challenge

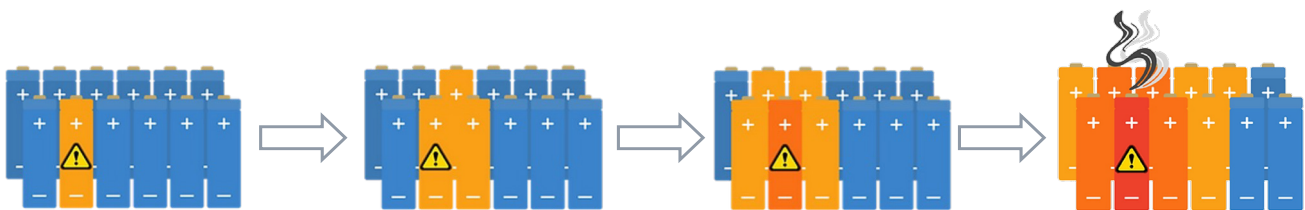
How rubber mitigates risks of thermal runaway events in EV

As the electric vehicle (EV) market continues to grow, thermal events are a major point of concern with lithium batteries. Preventing damage is extremely important to preserve the internal chemistry and heat dissipation capabilities of batteries and battery cells. By damping noise and vibration, custom-engineered rubber solutions offer mechanical protection for batteries in electric vehicles. Let's take a closer look at what a thermal runaway event is, and how to minimize the risk.

What is a thermal runaway event?

Thermal runaway happens when a battery cell overheats, even causing a domino effect of overheating other cells.

Preventing thermal runaway is one reason why efficient design is extremely important in EV development. Proper design and protection of battery cells can help mitigate the risk of a thermal runaway event. Effective coolant channels are one example of a critical design requirement for EVs.



How can rubber mitigate the risks associated with thermal runaway?

Experienced rubber component designers are uniquely qualified to make recommendations on using rubber as an isolator to protect critical components.

Examples of how rubber is ideal for EV designs:

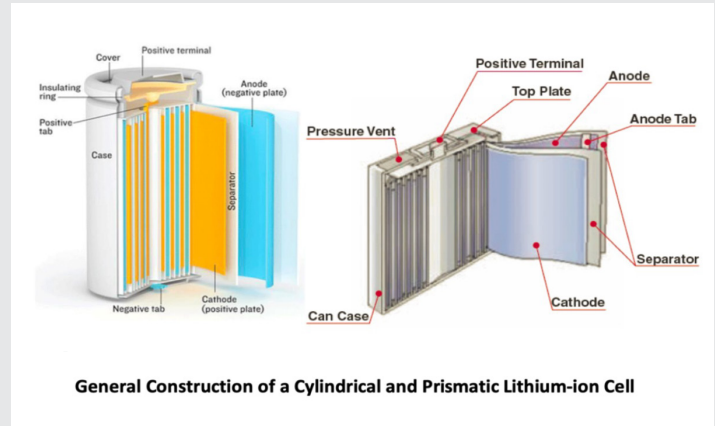
- **Components that can withstand high temperatures:** Rubber formulations with flame retardant and insulating properties are good candidates for EVs.

- **Thermal management:** Custom rubber components such as barriers and seals can offer heat resistance and protection of critical EV components.
- **Optimized coolant channels:** Rubber overmolding and adhesion to metal offer advantageous cooling efficiency.

Protecting batteries in EV designs

EVs that promise the high level of performance required for demanding applications need efficient and effective thermal management and battery protection. Custom-engineered rubber solutions offer precise designs and formulations for pliability, temperature, and durability that meet the needs of specific applications.

However, not all types of rubber have the same properties, so deep knowledge and expertise of different formulations, curing processes and surface treatments are needed to produce components that behave as needed.



Soucy Baron provides rubber solution design and formulation expertise

Manufacturers have relied on Soucy Baron for over 50 years to design, test, and produce quality, high-performance rubber compounds and components that meet specific requirements. With facilities in North America and overseas, Soucy Baron offers a wide range of capabilities.

For EV manufacturers that need rubber component expertise, Soucy Baron provides technical dominance in materials engineering, a library of over 900 recipes, and in-house formula development and mixing.

Soucy Baron helps you:

- Improve thermal and electrical insulation in EVs
- Reduce noise, vibration, and harshness
- Protect critical parts
- Speed time to market
- And much more

[Learn more](#) about how custom rubber solutions can improve EV design and performance.