

Product Name:

SEA 2

Thermal Runaway Inhibitor

Product Description:

Performance and safety enhancement
Li-ion battery additive

DESCRIPTION

Target Cell Chemistry	NMCs, NCA, LFP & LCO / Gr, Gr+Si
Additive Function	Low resistance Excellent high temperature capacity retention & recovery Safety enhancement
Target Product	Li-ion cells for E-mobility, ESS, consumer electronics, UAVs
Application	Long cycle life for Si dominant anodes High temperature storage, low gassing, high capacity retention Supplement/replacement for fluoroethylene carbonate Safety effect

ADDITIVE SPECIFICATIONS

Additive Purity	>99.9%
Impurities	H ₂ O < 50 ppm, HF < 20 ppm
Recommended Use Range	0.5% to 10%
Handling and Use	Handle in dry room or glovebox. Do not expose to moisture or air.
SDS	Provided with product
Packaging/Labeling	Complies with local shipping regulations
Availability	Product available upon request. Lead time is 2 to 4 weeks.

TESTING PARAMETERS

Power: 10 sec. 1C pulse discharge at 50% SOC

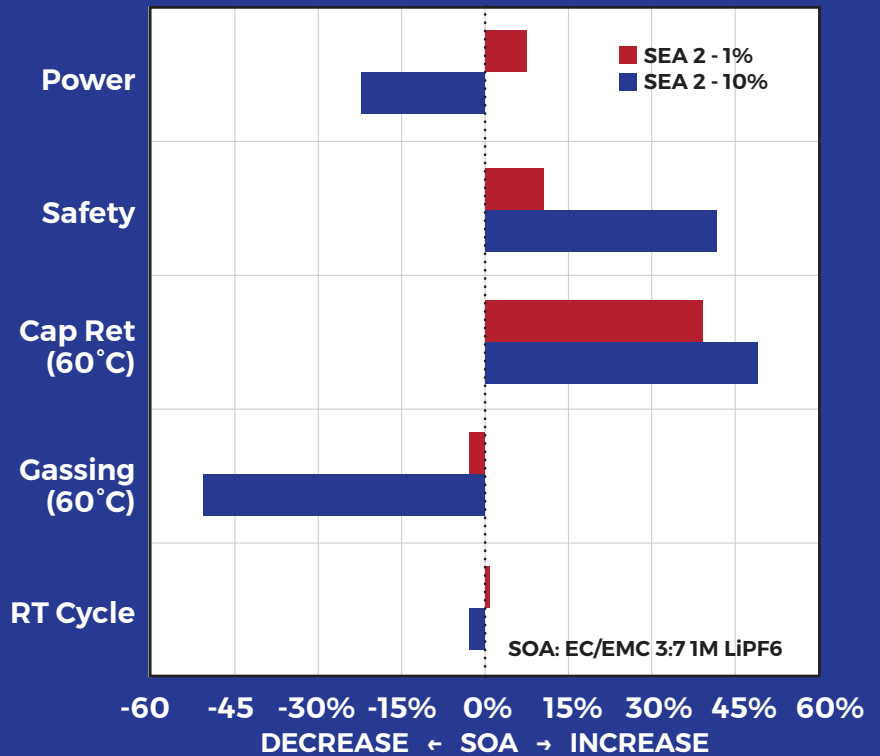
Safety: Hotbox 160°C until thermal runaway or 90 minutes. The % value represents the increase in the length of time over the baseline to reach either thermal runaway or test end time of 90 minutes.

High Temperature Storage: Four weeks at 60°C, 100% SOC. Capacity retention is the ratio of 0.3C charge before storage to 0.3C discharge after. Gassing was measured as the change in thickness at the center of the cell.

Cycle Life: 25°C, 1C/1C cycling (CV cut-off C/10)

Cell Configuration: 1.6 Ah capacity; stacked plate pouch cell, NMC811 – artificial graphite, 2.7 to 4.2V

- Cathode loading: 28.98 mg/cm²
- Anode loading: 19.22 mg/cm²
- Estimated energy density: 451 Wh/L
- Estimated specific energy: 235 Wh/kg



Case study data examples are available upon request.

For further application information and product details, please email info@sionicenergy.com.



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