

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

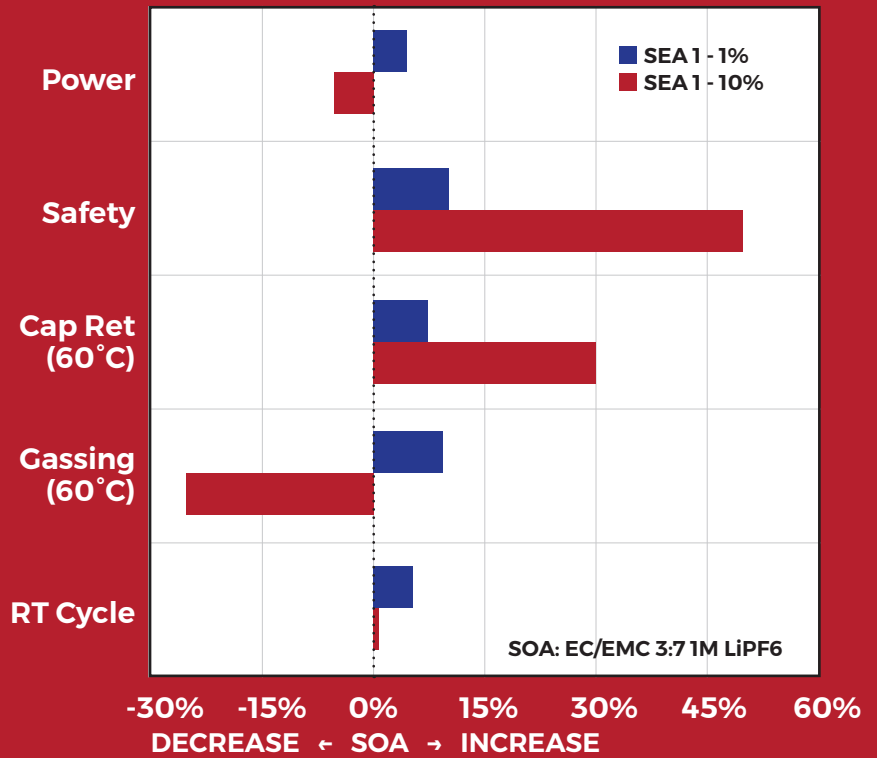
Safety: Hotbox 160° C until thermal runaway or 90 minutes. The % value represents the increase in the length of time over the baseline to reach either thermal runaway or test end time of 90 minutes.

High Temperature Storage: Four weeks at 60°C, 100% SOC. Capacity retention is the ratio of 0.3C rate charge before storage to 0.3C rate 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.