

BATTERY & ENERGY STORAGE



VOLTIX

Series

VOLTIX 197

VOLTIX 197 is a high-performance conductive additive for lithium-ion battery cathodes, engineered to maximise electrode conductivity at low additive loading. By forming an efficient conductive network around active particles, it lowers DC internal resistance (DCIR) at low state-of-charge and raises usable discharge capacity, supporting high-power performance for electric-vehicle and high-end energy applications.

Benchmarked in an NCM 622 cathode at around 1 wt% carbon, grades of this class deliver high discharge capacity with low internal resistance and sustain capacity retention through extended cycling, including at elevated temperature (45 °C). VOLTIX 197 disperses in NMP-based slurries, enabling lower slurry viscosity and higher achievable solids loading for faster, lower-cost electrode coating.

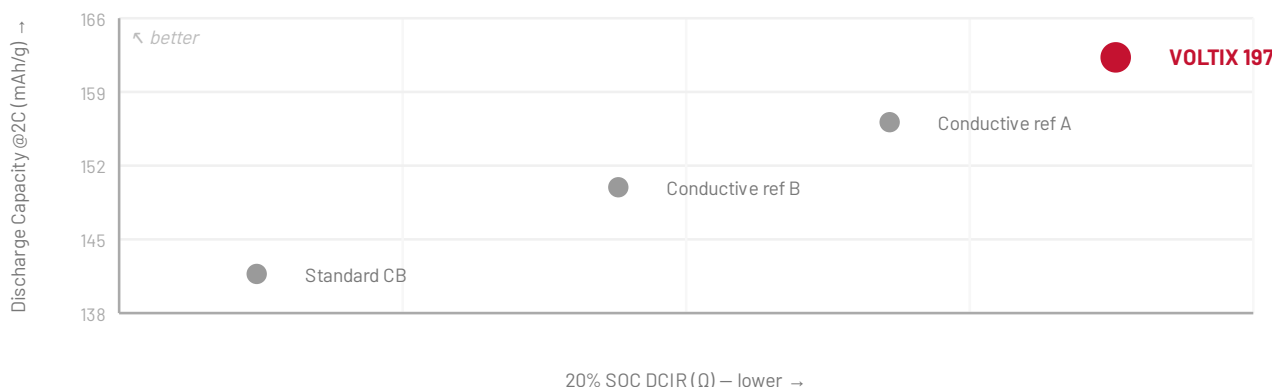
KEY APPLICATIONS

- Lithium-ion EV cathodes (BEV / PHEV)
- High-power & high-energy cells
- Energy storage systems (ESS)
- Consumer electronics cells
- NMP-based cathode slurries

PERFORMANCE FEATURES

- High electrode conductivity at low loading
- Low DCIR at low state-of-charge
- High usable discharge capacity
- Strong capacity retention at 45 °C
- Lower slurry viscosity / higher solids
- Efficient conductive network

Discharge Capacity vs Internal Resistance – Li-Ion (NCM 622, 1 wt%)



TYPICAL VALUE

Test Items	Unit	Standard
Physical Form	-	Powder
DBP Absorption No.	cc/100g	200 ± 10
BET Surface Area	m ² /g	77 ± 5
PH Value		9.0 ± 1.0
Fe Content	ppm	≤ 5
Other Metals (Ni,Cr,Cu,Co,Zn)	ppm	≤ 5
Sieve Residue 325M	ppm	≤ 10
Ash	%	≤ 0.1

APPLICATION FIELD

Application	Recommended Dosage
Li-Ion EV Cathodes (BEV / PHEV)	0.8 – 2%
High-Power & High-Energy Cells	1 – 2%
Energy Storage (ESS)	1 – 2%
Consumer Electronics Cells	0.5 – 1.5%
NMP Cathode Slurries	1 – 2%
Conductive Additive (NCM)	0.8 – 2%

■ Recommended dosage can vary with system, electrode/compound design and dispersion conditions.

Physical Form: Powder | Packaging: 5 kg paper or PE bag

ISTAR MATERIALS

Ground Floor, Plot 1/3, Priyadarshini Parisar
West Yellow Building
Opp. Hotel Grand Dhillon, Behind IDBI
Bank Bhilai, Chhattisgarh – 490020, India

Notice and Disclaimer

The data and information provided herein are based on our current knowledge and experience and are believed to be accurate. However, ISTAR MATERIALS cannot guarantee that similar results will be obtained by others as processing conditions and formulations may vary. This information is provided for guidance purposes only and does not constitute a warranty or guarantee of performance.

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