Eata Battery

Lithium-Rich Tin Alloy

Catlog Number: BMAM-0023

Description

Pre-lithiated tin alloy designed as a high-capacity anode for solid-state battery research, reducing the first-cycle lithium loss and improving density.

Basic Information

Chemical Formula: $Li_{22}Sn_5$

Appearance: Grey Granules

D50 Particle Size: 10 - 50 μm

Tap Density: ≥ 2.0 g/cm³

BET Surface Area: 1.0 - 3.0 m²/g

1st Discharge Capacity: ≥ 800 mAh/g

1st Coulombic Efficiency: ≥ 88%

Carbon Content: N/A

Active Metal Content: Li: ~20%

Ash Content: ≤ 0.10%

Moisture Content: ≤ 0.05%

pH Value: 11.0-13.0

Iron (Fe) Impurity: ≤ 50 ppm

True Density: 4.8 - 5.1 g/cm³

Compaction Density: ≥ 2.5 g/cm³

Crystal Structure: FCC

Surface Coating: None

Magnetic Impurities: ≤ 100 ppb

Electronic Conductivity: ~10^2 S/cm

Voltage Range: 0.01 - 1.5 V

Purity: ≥ 99.0%

Primary Application: Solid-state research

Thermal Stability: Moderate

Cycle Life: ≥ 300 cycles

Eata Battery delivers the world's battery makers a single, reliable source for every high-performance raw material—cathode to collector, catalyst to membrane—so you can design, scale and ship next-generation batteries faster.

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