Eata Battery

NCA Cathode Material

Catlog Number: BMCM-0041

Description

Nickel-Cobalt-Aluminum oxide powder designed for high-power discharge and high energy storage in cylinder-type lithium-ion cells.

Basic Information

Chemical Formula: $LiNiCoAlO_2$

Appearance: Black Powder

Molecular Weight: 97.47 g/mol

D50 Particle Size: 12 - 16 µm

Tap Density: ≥ 2.5 g/cm^3

BET Surface Area: 0.4 - 0.9 m^2/g

1st Discharge Capacity: ≥ 195 mAh/g

1st Coulombic Efficiency: ≥ 86%

pH Value: ≤ 12.0

Moisture Content: ≤ 0.10%

Magnetic Impurities: ≤ 50 ppb

Li/Na Content: 7.0 - 7.3%

Ni Content: 47.0 - 52.0%

Mn Content: N/A

Co Content: 9.0 - 14.0%

Transition Metals: ≤ 0.01%

P Content: N/A

Al Content: 1.5 - 3.5%

Crystal Structure: Layered Hexagonal

Compaction Density: ≥ 3.4 g/cm^3

Storage Conditions: Vacuum sealed, dry

Conductivity: ~10^{-3} S/cm

Voltage Range: 3.0 - 4.3 V

Purity: ≥ 99.5%

Primary Application: High-performance EVs

Thermal Stability: Moderate

Cycle Life: > 800 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.

Tel: 1-631-637-0420 | 1-631-533-0595
Email: info@eataray.com
Suite 103, 17 Ramsey Road, Shirley, NY 11967, USA