

Nickel-Rich NCA (Ni92)

Catlog Number: BMCM-0023

• Description

Ultra-high nickel NCA cathode engineered for maximum capacity. Suitable for cylindrical cells requiring high specific energy and long driving ranges.

• Basic Information

Chemical Formula: $\text{LiNi}_{0.92}\text{Co}_{0.06}\text{Al}_{0.02}\text{O}_2$

Appearance: Black Powder

Molecular Weight: 97.50 g/mol

D50 Particle Size: 11 - 15 μm

Tap Density: $\geq 2.5 \text{ g/cm}^3$

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

1st Discharge Capacity: $\geq 215 \text{ mAh/g}$

1st Coulombic Efficiency: $\geq 84\%$

pH Value: ≤ 12.3

Moisture Content: $\leq 0.08\%$

Magnetic Impurities: $\leq 30 \text{ ppb}$

Li/Na Content: 7.0 - 7.3%

Ni Content: 54 - 56%

Mn Content: N/A

Co Content: 3.5 - 4.5%

Transition Metals: Ni-Co-Al

Crystal Structure: Layered Hexagonal

Compaction Density: $\geq 3.3 \text{ g/cm}^3$

Storage Conditions: Vacuum sealed, cold

Conductivity: $\sim 10^{-3} \text{ S/cm}$

Voltage Range: 3.0 - 4.3 V

Purity: $\geq 99.8\%$

Primary Application: High-capacity EV packs

Thermal Stability: Moderate

Cycle Life: > 600 cycles

 For Research or Industrial Raw Materials, Not For Personal Medical Use!