

Cobalt-Free High-Ni Oxide

Catlog Number: BMCM-0018

• Description

Sustainable cobalt-free cathode material with high nickel content, providing high energy density while reducing dependence on expensive cobalt resources.

• Basic Information

Chemical Formula: $\text{LiNi}_0.9\text{Mn}_0.1\text{O}_2$

Appearance: Black Powder

Molecular Weight: 97.42 g/mol

D50 Particle Size: 9 - 13 μm

Tap Density: $\geq 2.3 \text{ g/cm}^3$

BET Surface Area: 0.4 - 0.8 m^2/g

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

1st Coulombic Efficiency: $\geq 87\%$

pH Value: ≤ 12.2

Moisture Content: $\leq 0.06\%$

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

Li/Na Content: 7.1 - 7.4%

Ni Content: 54 - 56%

Mn Content: 5 - 7%

Co Content: N/A

Transition Metals: Ni-Mn Oxide

Crystal Structure: Layered Hexagonal

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

Storage Conditions: Inert gas storage

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

Voltage Range: 2.8 - 4.3 V

Purity: $\geq 99.9\%$

Primary Application: Sustainable EVs

Thermal Stability: Moderate

Cycle Life: > 1000 cycles

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