

Nickel Niobate (NiNb₂O₆)

Catlog Number: BMAM-0045

• Description

Transition metal niobate providing a safe operating voltage and excellent lithium-ion diffusion for high-rate power battery applications.

• Basic Information

Chemical Formula: NiNb₂O₆

Appearance: Green/Grey

D50 Particle Size: 1 - 5 μm

Tap Density: ≥ 1.4 g/cm³

BET Surface Area: 5.0 - 12 m²/g

1st Discharge Capacity: ≥ 200 mAh/g

1st Coulombic Efficiency: ≥ 92%

Carbon Content: N/A

Active Metal Content: Nb: ~60%

Ash Content: ≤ 0.10%

Moisture Content: ≤ 0.05%

pH Value: 7.0 - 8.5

Iron (Fe) Impurity: ≤ 50 ppm

True Density: 5.2 - 5.4 g/cm³

Compaction Density: ≥ 2.8 g/cm³

Crystal Structure: Orthorhombic

Surface Coating: None

Magnetic Impurities: ≤ 50 ppb

Electronic Conductivity: ~10⁻⁴ S/cm

Voltage Range: 1.0 - 3.0 V

Purity: ≥ 99.5%

Primary Application: Fast-charge LIB

Thermal Stability: Very High

Cycle Life: ≥ 2500 cycles

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