

Bismuth Nanopowder

Catlog Number: BMAM-0021

• Description

Nanosized bismuth particles optimized for high-density sodium-ion anodes, providing a stable low-voltage plateau and fast alloying kinetics.

• Basic Information

Chemical Formula: Bi

Appearance: Black/Grey Powder

D50 Particle Size: 80 - 200 nm

Tap Density: ≥ 1.8 g/cm³

BET Surface Area: 15 - 35 m²/g

1st Discharge Capacity: ≥ 380 mAh/g

1st Coulombic Efficiency: $\geq 92\%$

Carbon Content: N/A

Active Metal Content: Bi: $\geq 99.9\%$

Ash Content: $\leq 0.05\%$

Moisture Content: $\leq 0.10\%$

pH Value: 6.5 - 7.5

Iron (Fe) Impurity: ≤ 20 ppm

True Density: 9.7 - 9.8 g/cm³

Compaction Density: N/A

Crystal Structure: Rhombohedral

Surface Coating: Oxide layer

Magnetic Impurities: ≤ 20 ppb

Electronic Conductivity: $\sim 10^4$ S/cm

Voltage Range: 0.2 - 1.0 V

Purity: $\geq 99.9\%$

Primary Application: SIB/Mg-ion research

Thermal Stability: High

Cycle Life: ≥ 800 cycles

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