

Boron-Doped Graphite

Catlog Number: BMAM-0058

• Description

Graphitic carbon doped with boron to enhance crystallinity and increase the lithium-ion diffusion rate, ideal for high-power density applications.

• Basic Information

Chemical Formula: C (B-Doped)

Appearance: Black Powder

D50 Particle Size: 15 - 20 μm

Tap Density: $\geq 1.1 \text{ g/cm}^3$

BET Surface Area: 1.0 - 2.5 m^2/g

1st Discharge Capacity: $\geq 355 \text{ mAh/g}$

1st Coulombic Efficiency: $\geq 94\%$

Carbon Content: $\geq 99.0\%$

Active Metal Content: B: 0.5-2 wt%

Ash Content: $\leq 0.05\%$

Moisture Content: $\leq 0.10\%$

pH Value: 6.0 - 8.0

Iron (Fe) Impurity: $\leq 30 \text{ ppm}$

True Density: 2.23 - 2.26 g/cm^3

Compaction Density: $\geq 1.65 \text{ g/cm}^3$

Crystal Structure: Hexagonal

Surface Coating: Boron

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

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

Voltage Range: 0.01 - 1.5 V

Purity: $\geq 99.9\%$

Primary Application: High-rate LIB

Thermal Stability: High

Cycle Life: $\geq 1500 \text{ cycles}$

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