

Silicon-Graphite (Si-Gr)

Catlog Number: BMAM-0051

• Description

Optimized blend of silicon and artificial graphite designed for commercial EV applications, balancing high energy density with long-term cycling stability.

• Basic Information

Chemical Formula: Si-Gr

Appearance: Dark Grey Powder

D50 Particle Size: 12 - 18 μm

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

BET Surface Area: 2.0 - 5.0 m^2/g

1st Discharge Capacity: $\geq 420 \text{ mAh/g}$

1st Coulombic Efficiency: $\geq 90\%$

Carbon Content: $\sim 85 \text{ wt}\%$

Active Metal Content: Si: 5 - 10 $\text{wt}\%$

Ash Content: $\leq 0.10\%$

Moisture Content: $\leq 0.10\%$

pH Value: 6.0 - 8.0

Iron (Fe) Impurity: $\leq 40 \text{ ppm}$

True Density: 2.1 - 2.3 g/cm^3

Compaction Density: $\geq 1.6 \text{ g/cm}^3$

Crystal Structure: Composite

Surface Coating: Carbon

Magnetic Impurities: $\leq 50 \text{ ppb}$

Electronic Conductivity: $\sim 10^2 \text{ S/cm}$

Voltage Range: 0.01 - 1.5 V

Purity: $\geq 99.9\%$

Primary Application: Standard EV cells

Thermal Stability: Moderate

Cycle Life: $\geq 1000 \text{ cycles}$

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