

## Nitrogen-Doped Graphene

Catlog Number: BMAM-0020

### • Description

Chemically doped graphene with nitrogen atoms to increase active sites and enhance electronic conductivity, ideal for high-power density applications.

### • Basic Information

Chemical Formula: N-Graphene

Appearance: Black Flakes

D50 Particle Size: 8 - 15  $\mu\text{m}$

Tap Density:  $\geq 0.12 \text{ g/cm}^3$

BET Surface Area: 500 - 800  $\text{m}^2/\text{g}$

1st Discharge Capacity:  $\geq 500 \text{ mAh/g}$

1st Coulombic Efficiency:  $\geq 78\%$

Carbon Content:  $\geq 95\%$

Active Metal Content: N: 3-5 wt%

Ash Content:  $\leq 0.20\%$

Moisture Content:  $\leq 0.60\%$

pH Value: 7.0 - 9.0

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

True Density: 2.0 - 2.2  $\text{g/cm}^3$

Compaction Density: N/A

Crystal Structure: 2D Doped

Surface Coating: Nitrogen

Magnetic Impurities:  $\leq 20 \text{ ppb}$

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

Voltage Range: 0.01 - 3.0 V

Purity:  $\geq 98.0\%$

Primary Application: High-rate capacitors

Thermal Stability: Excellent

Cycle Life:  $\geq 2000 \text{ cycles}$

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