

## Titanium Dioxide (Anatase)

Catlog Number: BMAM-0024

### • Description

Nanostructured anatase TiO<sub>2</sub> providing a safe voltage plateau and high rate capability for both lithium and sodium-ion insertion/extraction.

### • Basic Information

Chemical Formula: TiO<sub>2</sub>

Appearance: White Powder

D50 Particle Size: 100 - 300 nm

Tap Density:  $\geq 0.9$  g/cm<sup>3</sup>

BET Surface Area: 20 - 60 m<sup>2</sup>/g

1st Discharge Capacity:  $\geq 170$  mAh/g

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

Carbon Content: N/A

Active Metal Content: Ti:  $\geq 58\%$

Ash Content:  $\leq 0.20\%$

Moisture Content:  $\leq 0.10\%$

pH Value: 6.5 - 8.0

Iron (Fe) Impurity:  $\leq 40$  ppm

True Density: 3.8 - 4.0 g/cm<sup>3</sup>

Compaction Density:  $\geq 1.8$  g/cm<sup>3</sup>

Crystal Structure: Tetragonal

Surface Coating: None

Magnetic Impurities:  $\leq 30$  ppb

Electronic Conductivity:  $\sim 10^{-9}$  S/cm

Voltage Range: 1.0 - 3.0 V

Purity:  $\geq 99.8\%$

Primary Application: Safe LIB/SIB

Thermal Stability: Excellent

Cycle Life:  $\geq 2000$  cycles

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