

## Sodium Vanadium Phosphate

Catlog Number: BMCM-0012

### • Description

NASICON-structured sodium vanadium phosphate (NVP) offering high ionic conductivity and excellent rate capability for fast-charging sodium-ion applications.

### • Basic Information

Chemical Formula:  $\text{Na}_3\text{V}_2(\text{PO}_4)_3$

Appearance: Greenish/Grey Powder

Molecular Weight: 425.81 g/mol

D50 Particle Size: 2 - 8  $\mu\text{m}$

Tap Density:  $\geq 0.9 \text{ g/cm}^3$

BET Surface Area: 15 - 25  $\text{m}^2/\text{g}$

1st Discharge Capacity:  $\geq 115 \text{ mAh/g}$

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

pH Value: 7.0 - 9.0

Moisture Content:  $\leq 0.10\%$

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

Li/Na Content: 15.5 - 16.5% (Na)

Ni Content: N/A

Mn Content: N/A

Co Content: N/A

Transition Metals: V Oxide

Crystal Structure: NASICON Structure

Compaction Density:  $\geq 2.1 \text{ g/cm}^3$

Storage Conditions: Inert gas storage

Conductivity:  $\sim 10^{-6} \text{ S/cm}$

Voltage Range: 2.5 - 4.0 V

Purity:  $\geq 99.5\%$

Primary Application: Fast-charge SIB

Thermal Stability: High

Cycle Life: > 3000 cycles

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