

## Molybdenum Dioxide (MoO<sub>2</sub>)

Catlog Number: BMAM-0047

### • Description

High-purity MoO<sub>2</sub> powder with metallic-like conductivity and high theoretical capacity, offering low resistance and stable lithium-ion intercalation pathways.

### • Basic Information

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

Appearance: Black/Purple Powder

D50 Particle Size: 1 - 3 μm

Tap Density: ≥ 1.2 g/cm<sup>3</sup>

BET Surface Area: 10 - 20 m<sup>2</sup>/g

1st Discharge Capacity: ≥ 600 mAh/g

1st Coulombic Efficiency: ≥ 84%

Carbon Content: N/A

Active Metal Content: Mo: ~75%

Ash Content: ≤ 0.10%

Moisture Content: ≤ 0.08%

pH Value: 5.5 - 7.5

Iron (Fe) Impurity: ≤ 30 ppm

True Density: 6.4 - 6.5 g/cm<sup>3</sup>

Compaction Density: ≥ 2.8 g/cm<sup>3</sup>

Crystal Structure: Monoclinic

Surface Coating: None

Magnetic Impurities: ≤ 40 ppb

Electronic Conductivity: ~10<sup>2</sup> S/cm

Voltage Range: 0.01 - 3.0 V

Purity: ≥ 99.5%

Primary Application: High-capacity LIB

Thermal Stability: High

Cycle Life: ≥ 600 cycles

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