

## **Technical Data Sheet**

# ACS Material Monolayer Molybdenum Disulfide (Powder and Dispersion)

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#### **Contact Information:**

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Revision: 030117

# 1. Preparation Method

Lithium-based Intercalation Method

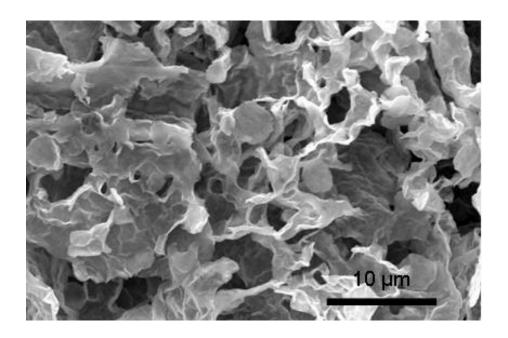
## 2. Characterizations

Composition: Monolayer Molybdenum Disulfide

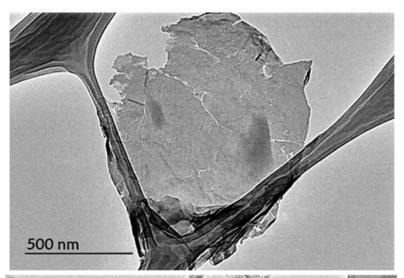
Appearance: Black Powder or Dispersion

Diameter: 0.2-5 μm, mainly concentrate in 1μm-3μm

Thickness:  $\sim$ 1 nm Monolayer ratio: >=90 wt%

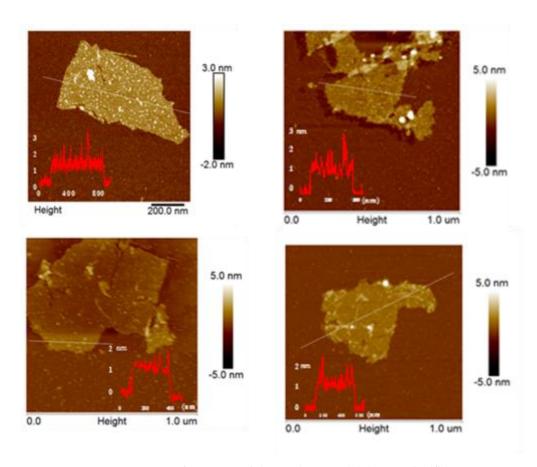


SEM Image (1) of ACS Material Monolayer Molybdenum Disulfide





TEM Image (2) of ACS Material Monolayer Molybdenum Disulfide



AFM Image (3) of ACS Material Monolayer Molybdenum Disulfide

#### 3. Application Fields

Secondary batteries, field-effect transistors, sensors, organic light-emitting diodes, memory.

Monolayer Molybdenum disulfide will be supplied as powder or dispersion, and it has good solubility in water and ethanol. The dispersion concentration of Monolayer Molybdenum disulfide with small diameter in water will be adjustable in 0.1mg- 5 mg/ml. If you have any questions, please contact us, and we will try our best to provide the solutions for you.

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