Technical Data Sheet

ACS Material Monolayer Tungsten Disulfide
(Powder and Dispersion)

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1. Preparation Method
Lithium-based Intercalation Method

2. Characterizations

<table>
<thead>
<tr>
<th>Characterization</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
<td>Monolayer Tungsten disulfide</td>
</tr>
<tr>
<td>Appearance</td>
<td>Black Powder or dispersion</td>
</tr>
<tr>
<td>Diameter</td>
<td>0.1-4 μm</td>
</tr>
<tr>
<td>Thickness</td>
<td>~1 nm</td>
</tr>
<tr>
<td>Monolayer ratio</td>
<td>&gt;=90%</td>
</tr>
</tbody>
</table>

SEM Image (1) of ACS Material Monolayer Tungsten Disulfide
TEM Image (2) of ACS Material Monolayer Tungsten Disulfide
AFM Image (3) of ACS Material Monolayer Tungsten Disulfide
3. Application Fields

Transistor, sensor, photocatalytic, electronic device.

Monolayer Tungsten disulfide will be supplied as powder or dispersion, and it has good solubility in water and ethanol. The dispersion concentration of Monolayer Tungsten disulfide with small diameter in water will be adjustable in 0.1mg - 1 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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