



Technical Data Sheet

ACS Material Monolayer Hexagonal Boron Nitride (hBN) on Copper Foil

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Revision: 061118

1. Preparation Method

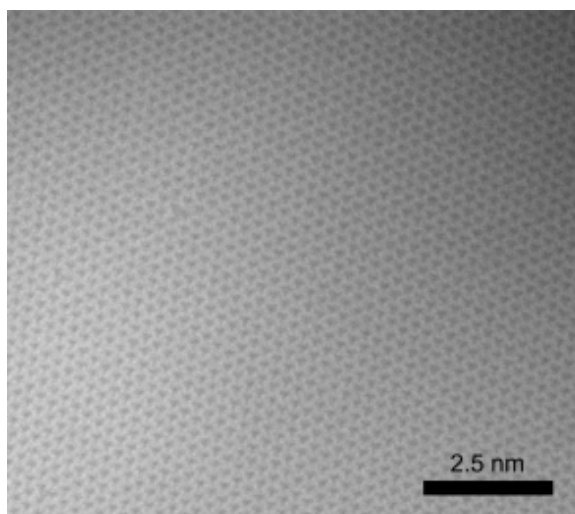
CVD Method

2. Characterizations

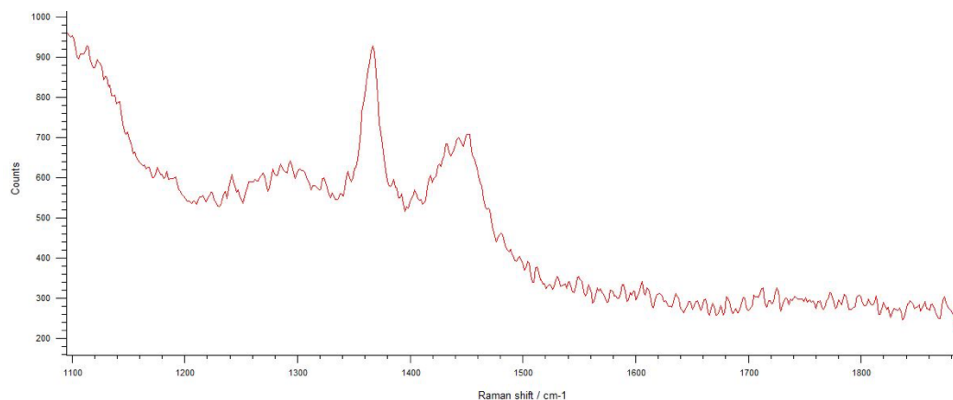
	Monolayer hBN
Transparency	> 97%
hBN Coverage	100% with sporadic adlayers
Raman Peak	1370 /cm ⁻¹
Bandgap	5.97 eV
Grain size	>4 μm
Copper Foil	25 μm thick



Typical Crystal Diffraction Image of ACS Material Monolayer hBN



Typical TEM Image of ACS Material Monolayer hBN



Typical Raman Spectrum of ACS Material Monolayer hBN

* The indicated product metrics are generic to our transfer process. For all ACS Material products, the displayed range represents electronic data that we have obtained using our in-house transfer capabilities to transfer hBN to SiO₂. Your own metrics will depend entirely on the transfer methods that you use, and the resultant quality of your transfers.

3. Application Fields

- 1) Proton conductors
- 2) Fuel cells
- 3) Water electrolysis
- 4) Graphene-based devices

4. User Instruction

- 1) To ensure the maximum shelf life of your graphene sample, it is best stored under vacuum or in inert atmosphere (Argon or Nitrogen) conditions once the vacuum sealed package has been opened.
- 2) Products are secured to their underlying plastic containers with four small Kapton tapes, one in each corner. Gently peel the tape or cut off the corners of the foil to release the foil from the plastic container. Please recycle your containers when they are no longer needed.

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