

Graphene Supermarket 氮化硼分散液

中文名称: Graphene Supermarket 氮化硼分散液

英文名称: Boron Nitride Dispersion

货 号: ML1169

CAS 号: 10043-11-5

包 装: 5.4mg/L / 9-10mg/L

参 数: 5.4mg/L 100ml 1-5 层

浓 度: 9-10 mg/L

保质期: 6 月常温干燥避光

Boron Nitride (BN) Pristine Flakes in Solution, 100 ML

BN Pristine Flakes are nanoscale crystals dispersed in ethanol / water solution. Solution of nano-BN has a white translucent color, in contrast to the milky suspension of micro-sized BN flakes.

Properties:

Lateral Size: 50-200 nm

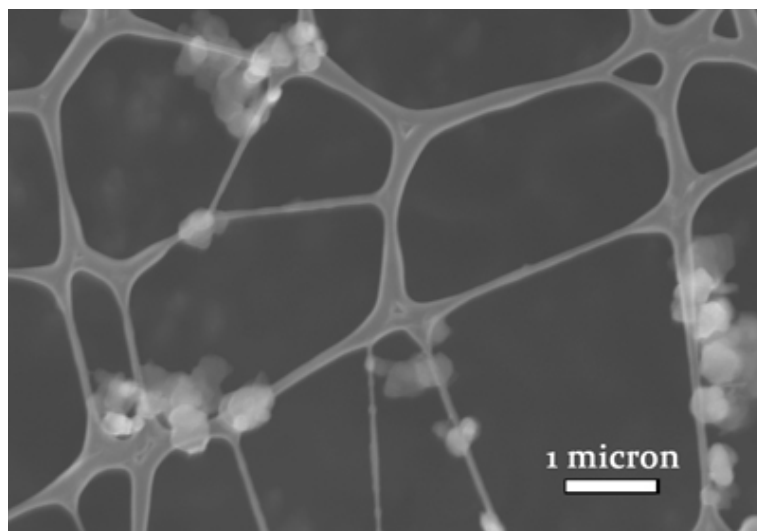
Thickness: 1-5 Monolayers

Purity in Dry Phase: >99%

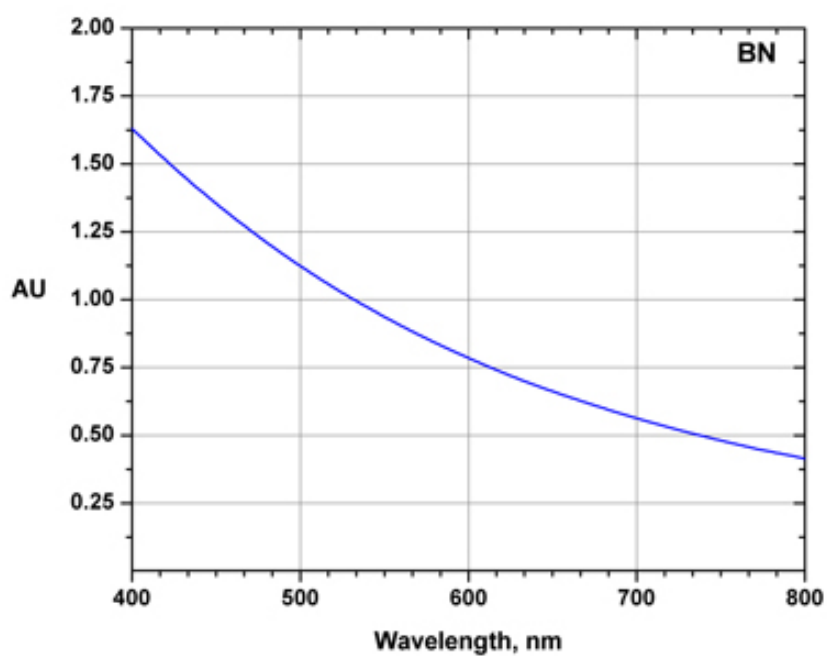
Solution Concentration: 5.4 mg/L

Solution is stable under ambient conditions

SEM image of a BN flake



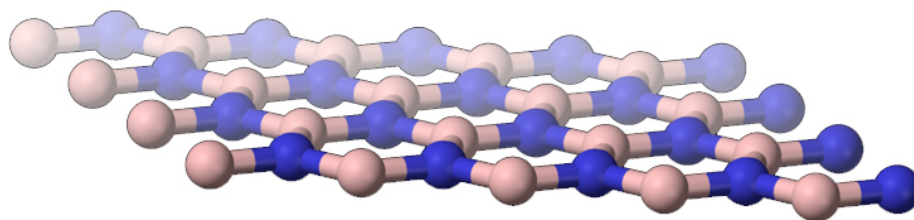
UV-Visible Absorption Spectrum



Boron nitride is a chemical compound with chemical formula BN, consisting of equal numbers of boron and nitrogen atoms. BN is isoelectronic to a similarly structured carbon lattice and thus exists in various crystalline forms. The hexagonal form corresponding to graphite is the most

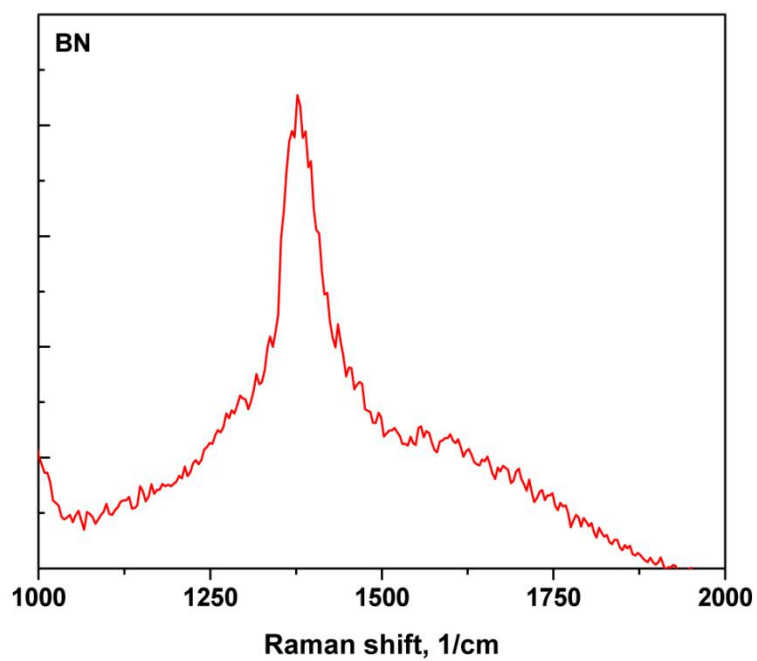
stable and softest among BN polymorphs, and is therefore used as a lubricant and an additive to cosmetic products.

Depiction of BN Molecular Structure



Preparation Method: Solution-based Exfoliation

BN Raman Spectrum



Applications

Dielectric Layer in Transistors

Hybrid Materials

BN Research

Inks

Thin Insulating Films

Protective Coatings

Deep Ultraviolet (DUV) Emitters

Check out our WS₂, MoS₂, BN trial pack if you would like to test all three NEW products by clicking [HERE!](#)

Academic References:

Electronics and optoelectronics of two-dimensional transition metal dicalcogenides, Wang et al.
Nature Nanotechnology, 7 (2012), pp. 699-712