

Technical Data Sheet
Hexagonal Boron Nitride (hBN, nanosheet)
Properties

Form : Nanosheet Powder (stack of sheet)
Full Name : Hexagonal Boron Nitride
CAS Number: 10043-11-5

Preparation: Chemical Vapor Deposition (CVD)
Particle Size : <100 nm
Structure : Hexagonal (2D)

Product Description

hBN, a structural analogue of graphene, has strong intralayer covalent bonding between B and N atoms and weak interlayer van der Waals interactions⁽¹⁾.

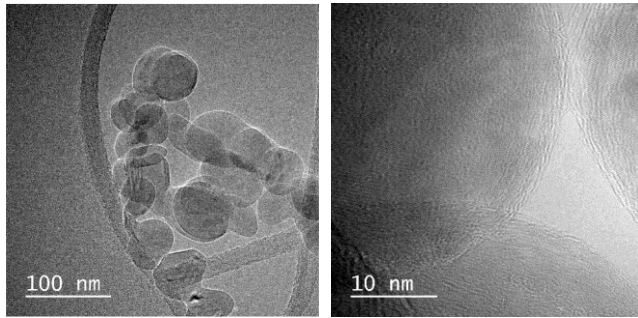
Application areas:

hBN can potentially be used in many fields including pharmacy, cosmetics, and chemistry because of their biocompatibility, high chemical and thermal stability, excellent mechanical strength, and electrical insulation properties⁽¹⁾.

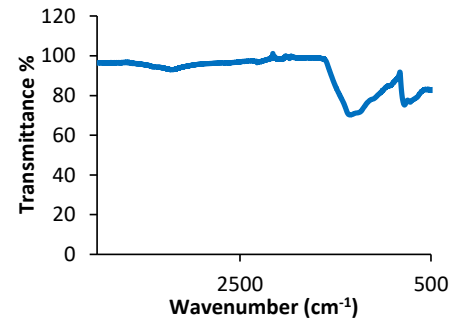
Storage conditions: Room temperature for the powder form, +4°C for the suspension form

Packaging : 2 mg, 5 mg, 10 mg

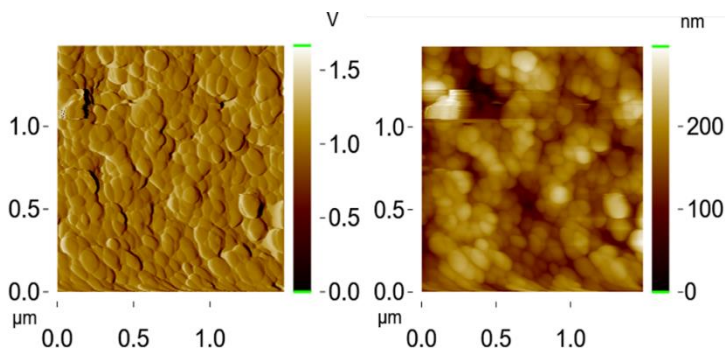
Quality Control



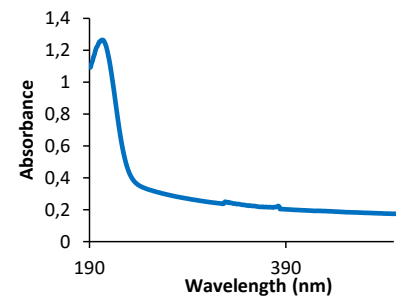
TEM images of hBN with different magnification



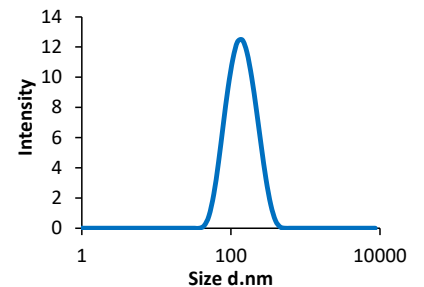
FTIR spectrum



AFM images of hBN



UV-vis spectrum



DLS spectrum

References : (1) Melis Emanet Ciofani, Özlem Şen, and Mustafa Çulha*
Hexagonal Boron Nitride Nanoparticles for Prostate Cancer Treatment