

Technical Data Sheet Boron Nitride Nanotube (BNNT) Properties

Form : Nanotube Powder
Full Name : Boron Nitride Nanotube
CAS Number: 10043-11-5

Preparation: Chemical Vapor Deposition (CVD)
Diameter : <100 nm
Structure : Multi-walled boron nitride nanotube

Product Description:

BNNT consists of boron (B) and nitrogen (N) atoms in its structure and it is the cylindrical form of hexagonal boron nitride (hBN) with approximately 1-100 diameter and varying lengths.

Properties:

Superior mechanical features, high thermal conductivity, electrical insulator, large band gap (5.5 eV), stable to oxidation and heat, high hydrogen storage capacity, neutron radiation shielding, piezoelectric, biocompatible

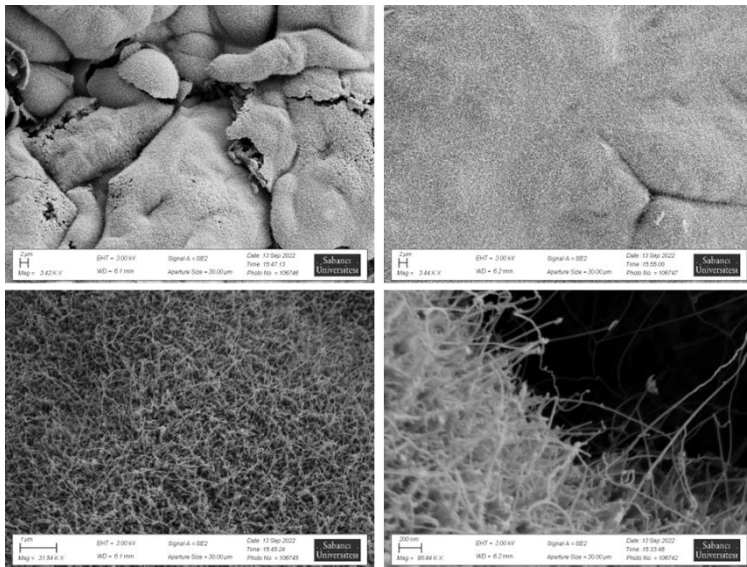
Application areas:

Flame-resistant materials, radiation shielding, piezoelectric devices, thermally conductive insulators, electrically insulating, polymer composites, sensors, biomedical, ceramic composites

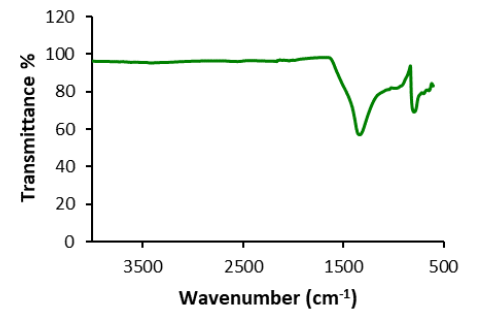
Storage conditions: Room temperature for the powder form, +4°C for the suspension form

Packaging : 10 mg, 50 mg, 100 mg

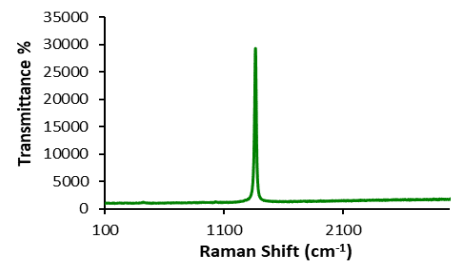
Quality Control



SEM images of BNNT with different magnifications



FTIR spectrum



Raman spectrum