



NH₂-Multi-Walled Carbon Nanotubes

PRODUCT DATA SHEET

NH₂-Multi-Walled Carbon Nanotubes

Description

Carbon nanotubes are simple substances composed of carbon atoms and can be regarded as hollow tubular structures formed by the curling of graphene. On the surface of carbon nanotubes, the carbon atoms are bonded to each other in the form of sp² hybrid orbitals, which are arranged as hexagonal graphite layers. In theory, this regular hexagonal structure is perfectly evenly distributed over the entire surface of the carbon nanotubes. Topologically, the common structure and properties of graphene and carbon nanotubes are one of the important factors for their similarity. Multi-walled carbon nanotubes (MWCNTs) are materials made of multiple layers of carbon nanotubes stacked on top of each other, each layer can be viewed as a single-walled carbon nanotube. This unique structure gives multi-walled carbon nanotubes a range of excellent physical and chemical properties, including high strength, high toughness, good electrical conductivity and chemical stability.

Abvigen offers high quality NH₂-multi-walled carbon nanotubes. The product has high repeatability between batches, which can meet the needs of various customers for personalized materials such as research and development, testing and production.

For custom sizes, formulations or bulk quantities please contact our customer service department.

Website: www.abvigen.com **Phone:** +1 929-202-3014 **Email:** info@abvigenus.com

Characteristics

Type: NH₂-Multi-Walled Carbon Nanotubes

Size: 1 g

MWCNTs-NH₂ purity: >95%

MWCNTs purity: 99%

Content of -NH₂: 0.45wt%

Outer diameter: 7-13 nm

Inner diameter: 2-4 nm

Length: ~55 μm

SSA: >233 m²/g



Color: Black

Tap density: 0.256 g/cm³

Electric conductivity: >100 s/cm

Production method: CVD

Applications

Additives in polymers; Catalysts; Electron field emitters for cathode ray lighting elements; flat panel display; gas-discharge tubes in telecom networks; Electromagnetic-wave absorption and shielding; Energy conversion; Lithium-battery anodes; Hydrogen storage; Nanotube composites (by filling or coating); Nanoprobes for STM, AFM, and EFM tips; nanolithography; nanoelectrodes; drug delivery; sensors; Reinforcements in composites; Supercapacitor

Ordering Information

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