Silane-Coated Helical Multi Walled Carbon Nanotubes
PRODUCT DATA SHEET

Silane-Coated Helical 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 sp^2 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. Helical Multi Walled Carbon Nanotubes is manufactured by acetylene catalytic decomposition over Ni-Cu/A_2O_3 catalyst. The content of helical structure CNTs is about 90wt%. The rest is ordinary CNTs.

Abvigen offers high quality silane-coated helical 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: Silane-Coated Helical Multi Walled Carbon Nanotubes

Size: 1 g

Outside diameter: 80-180 nm

Length: 1-13 µm

SSA:> 50 m^2/g

Ash: < 5 wt%

Color: Black

Electrical conductivity: >100 s/cm

True density: ~2.1 g/cm^3

Ignited Temperature: 560-600°C

Manufacturing method: CVD

Applications

(1) additives in polymers; (2) catalysts; (3) electron field emitters for cathode ray lighting elements; (4) flat panel display; (5) gas-discharge tubes in telecom networks; (6) electromagnetic-wave absorption and shielding; (7) energy conversion; (8) lithium-battery anodes; (9) hydrogen storage; (10) nanotube composites (by filling or coating); (11) nanoprobes for STM, AFM, and EFM tips; (12) nanolithography; (13) nanoelectrodes; (14) drug delivery; (15) sensors; (16) reinforcements in composites; (17) supercapacitor.

Ordering Information

Website: www.abvigen.com

Phone: +1 929-202-3014

Email: info@abvigenus.com