Stearic Acid-Coated Large Inner Diameter Thin Multi-Wall Carbon Nanotubes
PRODUCT DATA SHEET

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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. 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. Large Inner Diameter Thin Multi-Wall Carbon Nanotubes is manufactured by alcohol pyrolysis using ferrocene as catalyst in floating reactor. The inner diameter is more than 40 nm mostly, and the CNTs have a thin wall mostly. Because it is produced in floating reactor, the product has a wide range outside diameter distribution.

Abvigen offers high quality stearic acid-coated large inner diameter thin multi-wall 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: Stearic Acid-Coated Large Inner Diameter Thin Multi-Wall Carbon Nanotubes

Size: 1 g

Purity: > 95 wt% (Thin Multi-Wall carbon nanotubes-TEM)

Outside diameter: 50 nm

Inside diameter: 40 nm

Length: 20 µm (TEM)

SSA: > 200 m^2/g (BET)

Color: Black

Ash: < 5 wt%

Electrical conductivity: >100 s/cm

Tap density: 0.0441 g/cm^3

True density: ~2.1 g/cm^3

Ignited temperature: > 580°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

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