Carbon Nanotube-Black Carbon
PRODUCT DATA SHEET

Carbon Nanotube-Black Carbon

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. Carbon black surface is usually negatively charged. The black carbon and CNTs through Electrostatic adsorption self-assembly form a uniform and stable complex. Carbon black nanoparticles effectively isolate the agglomerations of CNTs and form stable CNTs/Carbon Black composite. Carbon black has a large surface area with electronegativity, therefore, the carbon black nanoparticles can adsorb more of CNTs.

Abvigen offers high quality carbon nanotube-black carbon. 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: Carbon Nanotube-Black Carbon

Size: 5 g

CNTs (Outside diameter: > 50 nm, Inside diameter: 5-15 nm, length: 5-20 μm)--treated by Cationic surfactant (Cetyl trimethyl ammonium bromide)

The Super Conductive Black Carbon Nanoparticles (Size: 50 nm~100 nm, particles shape: spherical)

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CNTs 33.3wt%

Carbon Black 66.7wt%

SSA: 558.89 m^2/g

Volume resistivity: < 1 Ω·CM

Advantages

Higher strength and wear resistance

Good processing and mechanical properties

Applications

Conductive sheet

Clean sheet

Wear-resistant sheet

Conductive film

High-conductive plastics

Ordering Information

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