Carbon Nanotube-Polystyrene Microspheres
PRODUCT DATA SHEET

Carbon Nanotube-Polystyrene Microspheres

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. Polystyrene microspheres and CNTs through Electrostatic adsorption self-assembly form a uniform and stable complex ("bunch of grapes" complex structure, fibrous CNTs stems, spherical polystyrene microspheres grapes). Polystyrene microspheres effectively isolate the agglomerations of CNTs and form stable CNTs/Polystyrene microspheres composite. Polystyrene microspheres has a large surface area with electronegativity, therefore the polystyrene microspheres can adsorb more of CNTs.
Abvigen offers high quality carbon nanotube-polystyrene microspheres. 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-Polystyrene Microspheres

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).

Polystyrene microspheres (about 100 nm~300 nm, microspherical particles)--polystyrene microspheres surface is usually negatively charged.

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CNTs 20wt%

Polystyrene Microspheres 80wt%

SSA: 7.6 m^2/g

Volume resistivity: <10 Ω·CM

Advantages

Higher strength and wear resistance

Good processing and mechanical properties

Applications

Conductive sheet

Clean sheet

Wear-resistant sheet

Conductive HIPS sheet

Conductive ABS plastic injection products

Ordering Information

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