

Graphene Carbon Nanotubes Ag Nanopowder Mixed, Water Dispersion PRODUCT DATA SHEET

# Graphene Carbon Nanotubes Ag Nanopowder Mixed, Water

## **Dispersion**

## Description

Graphene has a two-dimensional structure of a carbonaceous new material, which has excellent electrical, thermal and mechanical properties. Our graphene with a very large surface area 500 ~ 1200 m<sup>2</sup>/g; It is very difficult to be dispersed in a polar or non-polar solvents. Based on our lab experimental results from numerous dispersants screened out, we added one best suitable special dispersant and used a high capacity ultrasonic equipment to disperse our graphene product. After testing, the liquid is a very uniform and very stable graphene water dispersion product. Graphene Carbon Nanotubes Ag Nanopowder Mixed, Water Dispersion can effectively improve the electrical conductivity and mechanical properties, and can enhance tensile strength, hardness and elastic modulus characteristics. Abvigen offers high quality graphene carbon nanotubes Ag nanopowder mixed, water dispersion. 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: <u>www.abvigen.com</u> Phone: +1 929-202-3014 Email: <u>info@abvigenus.com</u>

## Characteristics

Type: Graphene Carbon Nanotubes Ag Nanopowder Mixed, Water Dispersion (CNTs : Graphene : Ag = 1 : 1 : 1) Size: 60 mL Concentration: 6wt%

Graphene Nanopowder Parameters: Graphene Purity: >99wt% Graphene Thickness: <5 nm Graphene Diameter: 1 μm - 12 μm



Graphene Specific Surface Area: 500 - 1200 m<sup>2</sup>/g Graphene Color: Black Conductivity: 1000-1500 S/M The Product COA: C=99.6%, O<0.4%

Carbon Nanotube Parameters: Multi Walled Carbon Nanotubes (MWNTs, MWCNTs) Purity: > 97% (carbon nanotubes) Average Outside Diameter: >55 nm Average Inside Diameter: 8 nm Length: 10-30 μm (TEM) SSA: > 60 m²/g (BET) Color: Black Ash: <1.5 wt% Electrical Conductivity: >100 s/cm Tap Density: 0.12 g/cm<sup>3</sup> True Density: ~2.1 g/cm<sup>3</sup>

Silver Nanopowder Parameters: Ag Nanopowder Particle Size: 10 nm Puriy: 99.99% Particle Shape: Spherical

### Advantages

Effectively improve the electrical conductivity and mechanical properties Effectively enhance tensile strength, hardness and elastic modulus characteristics Broad-spectrum sterilization with long lasting effect

### Applications

Screen displays, electric motors, sensing devices, aerospace and automotive devices, body armor and tear-resistant cloth fibers and textiles products, sports equipments. Serve as a conductive metallic or semiconductor, conductive films in coatings, plastics, certain bioscience applications, solar and

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electronic 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. Also, the product contains Silver Nanopowder, More Application such as: Various antibacterial finishing for textiles, paper products, leather and sponge; anti-bacterial deodorant treatment for all kinds of footwear, toys and daily necessities; used to implement anti-bacterial deodorizing for a variety of water-based and oil-based paints; widely used in the medical field: microbicides, medical rubber hose, antibacterial gel, lotion and tablets; soap, cleaning supplies; chemical building materials; plastic products; nano-silver can be added to PE, PP, PC, PET, ABS and other plastics to achieve antibacterial function

### **Ordering Information**

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