

# Graphene Copper Nanoparticles, Dry Powder PRODUCT DATA SHEET

# **Graphene Copper Nanoparticles, Dry Powder**

# 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  $500 \sim 1200 \text{ m}^2/\text{g}$ . Graphene Copper Nanoparticles, Dry Powder is composed of highly electric conductive graphene and copper Nanoparticles / nanopowder. The copper nanopowder / nanoparticles can not only prevent dispersed graphene from reagglomerating, but also exhibit synergetic effect with graphene. By mixing the two conductive products, it can effectively improve the electrical conductivity, thermal conductivity and mechanical properties; effectively enhance tensile strength, hardness and elastic modulus characteristics, and provide higher electrode conductivity and stronger electrode mechanical strength and adhesive attraction.

Abvigen offers high quality graphene copper nanoparticles, dry powder. 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 Copper Nanoparticles, Dry Powder **Size:** 50 g

Graphene Nanopowder Parameters: Graphene purity: >99wt% Graphene thickness: <5 nm Graphene diameter: 1 μm - 12 μm Graphene specific surface area: 500 - 1200 m²/g Graphene color: Black Conductivity: 1000-1500 S/M

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The product COA: C=99.6%, O<0.4% Copper (Cu) Nanopowder Parameters: Copper Nanopowder / Nanoparticles (Cu, metal basis) Copper nanopowder / nanoparticles true density: 8.9 g/cm<sup>3</sup> Copper nanopowder / nanoparticles purity: 99.9% Copper nanopowder / nanoparticles APS: 25 nm Copper nanopowder / nanoparticles SSA: 42 m<sup>2</sup>/g Copper nanopowder / nanoparticles color: Black Copper nanopowder / nanoparticles morphology: Spherical

#### Advantages

Effectively improve the electrical conductivity, thermal conductivity and mechanical properties Effectively enhance tensile strength, hardness and elastic modulus characteristics Provide higher electrode conductivity and stronger electrode mechanical strength and adhesive attraction

#### 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 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.

### **Ordering Information**

Website: <u>www.abvigen.com</u> Phone: +1 929-202-3014 Email: <u>info@abvigenus.com</u>