

### Graphene Nickel Nanoparticles, Dry Powder PRODUCT DATA SHEET

# **Graphene Nickel 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 ~ 1200 m<sup>2</sup>/g. Graphene Nickel Nanoparticles are composed of highly electric conductive graphene and nickel magnetic nanopowder. The nickel magnetic 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. Also, can obtain magnetic nano-materials in the application of magnetic recording and coatings.

Abvigen offers high quality graphene nickel 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: www.abvigen.com Phone: +1 929-202-3014 Email: info@abvigenus.com

### Characteristics

Type: Graphene Nickel Nanoparticles, Dry Powder

**Size:** 50 g

## **Graphene Nanopowder Parameters:**

Graphene has a two-dimensional structure of a carbonaceous new material. Graphene has excellent electrical, thermal and mechanical properties. Our graphene with a very large surface area 500 ~ 1200  $m^2/g$ .

**Graphene purity:** > 99wt%

**Graphene thickness:** < 5 nm



Graphene diameter:  $1 \mu m - 12 \mu m$ 

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%

**Nickel Nanopowder Parameters:** 

Nickel Nanopowder / Nanoparticles (Ni)

Ni nanoparticles purity: 99.9% (metal basis)

Ni nanoparticles color: Black

Ni nanoparticles APS: 50 nm

Ni nanoparticles SSA: 45 m<sup>2</sup>/g

Ni nanoparticles morphology: Spherical

Ni nanoparticles true density: 8.9 g/cm<sup>3</sup>

### **Advantages**

Excellent electrical, thermal 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: www.abvigen.com

Phone: +1 929-202-3014

Email: <a href="mailto:info@abvigenus.com">info@abvigenus.com</a>

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