

# Graphene Tungsten Nanoparticles, Dry Powder PRODUCT DATA SHEET

## **Graphene Tungsten 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  $500 \sim 1200$  m²/g. Graphene Tungsten Nanoparticles, Dry Powder is composed of highly electric conductive graphene and tungsten Nanoparticles / nanopowder. The tungsten 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 tungsten 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 Tungsten 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 m<sup>2</sup>/g

**Graphene color:** Black

Conductivity: 1000-1500 S/M

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The product COA: C=99.6%, O<0.4%

**Tungsten (W) Nanopowder Parameters:** 

Tungsten Nanoparticles Purity: 99.95+% (metal basis)

Tungsten nanoparticles APS: 40 nm

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

Tungsten nanoparticles color: Black

Tungsten nanoparticles morphology: Spherical

Tungsten nanoparticles bulk density: 2.3 g/cm<sup>3</sup>

Tungsten nanoparticles true density: 19.3 g/cm

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** 

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