

# Carbon Black & Graphene Mixed, Dry Powder PRODUCT DATA SHEET

# Carbon Black & Graphene Mixed, 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. Carbon Black & Graphene Mixed, Dry Powder is composed of highly electric conductive graphene and highly conductive carbon black nanopowder. The carbon black 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 carbon black & graphene mixed, 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:** Carbon Black & Graphene Mixed, 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



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

**Carbon Black Nanopowder Parameters:** 

Carbon black nanopowder morphology: Near spherical

Carbon black nanopowder purity: >99%

Carbon black nanopowder color: Black

Carbon black nanopowder APS: 120 nm

Volume resistivity:  $2^{-5} \times 10^{-4} \Omega \cdot \text{cm}$ 

Carbon black nanopowder true density: 0.38 g/ml

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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