GRAPHENE OXIDE POWDER

Product Description

MstnLand's graphene oxide powder is the introduction of oxygen-containing functional groups, such as hydroxyl, carboxyl, epoxy, etc., on a single sheet of graphene. Therefore, it is more active than graphene and is easy to graft modification. It can be remixed with composite materials in situ, thus giving the composite materials conductive, thermal, strengthening, flame retardant, antibacterial, antibacterial and other properties, and has good hydrophilicity. After reduction, oxygen-containing functional groups can be removed, which is an important precursor of graphene.

Technical Specifications

Item	Parameter
Aspect	Black fluffy powder
Carbon Content	46%
Hydrogen Content	0-1%
Nitrogen Content	0-1%
Sulphur Content	<1.5%
Oxygen Content	46%
Analysis and testing	Infrared, XPS, Raman, XRD, TGA, SEM, TEM
Packaging	5g/bottle, 10g/bottle, 20g/bottle, 40g/bottle, 50g/bottle, 100g/bottle, 200g/bottle, 400g/bottle
Customization	Available

Product Advantages

- High specific surface energy, good hydrophilicity, adsorption and mechanical capabilities.
- Good dispersion stability in water and most polar organic solvents.
- Good wettability and surface activity, can be stripped by small molecules or polymer intercalation.
- It can improve the thermal, electrical, mechanical and other comprehensive capabilities of materials.

Applicable Fields

- Composite material field: graphene oxide has excellent mechanical capacity, good thermal conductivity and large specific surface area, which can be applied to rubber, plastic, resin, fiber and other polymer composite material field;
- Biomedical field: Due to its high specific surface area and wide range of conjugate structure, GO has good application value in drug loading, especially in the aspect of anticancer drug carrier. After technical treatment, GO can be supplemented with non-water-soluble anticancer drugs.
- Photocatalytic field: graphene oxide has good adsorption performance. Together with nanomaterials, it can prepare catalytic materials with better performance and higher catalytic efficiency, which can be applied to the photocatalytic industry to further improve the degradation efficiency of pollutants;
- Analysis and detection field: The application of GO in PCR technology can significantly improve the specificity, sensitivity and amplification yield of PCR, eliminate primer dimers formed in amplification, and have a wide optimization range, which can be widely applied to DNA templates of various concentrations and complexity;
- Field of corrosion protection: Like graphene, graphene oxide has excellent anticorrosive properties, but it also has more active sites than graphene, which is easier to modify and can be well dispersed in coatings;
- Field of electric conduction: although the conjugate network is damaged in the oxidation process, graphene oxide has certain insulation properties, but after reduction treatment, part of the conductivity can be recovered, which can meet the requirements of anti-corrosion coatings on conductivity, reduce or replace the use of metal filler;
- Field of heat conduction: High thermal conductivity and large specific surface area lay the foundation for graphene oxide as a thermal conductivity material. Meanwhile, its active site improves its serviceability. Stable conjugate structure enables it to work at high temperature and prolongs the service life of the product.

Disposal and Storage

Operators should wear appropriate protective clothing and gloves, avoid direct contact with skin, and immediately rinse with plenty of water once entering eyes. Store tightly in a cool, ventilated and dry environment. Use as soon as possible after unpacking. The recommended storage temperature is from 5 to 35°C. Keep away from tinder and heat source, and store separately with strong reducing agent and flammable substance.