

Material Safety Data Sheet (MSDS)

Graphite

Part 1: Chemical name

Chemical name: graphite, natural graphite black Powder

Chemical name: graphite

English name of chemical: Graphite;

English name: Graphite Powder

Technical specification number: CAS No. : 7782-42-5

Manufacturer name: Shenzhen City Magaoding Chemistry Co., LTD

Address: 2 floor, #A ChuangFu Industrial Zone, No.4 GuanChang Road DongGuan City, P.R.China

Effective date: May 30, 2025

Part 2: composition/composition information

Chemical quantity CAS No. 7782-42-5

Part 3: risk overview

Category of risk: irritation to eyes and respiratory tract. Route of invasion: inhalation, eye and skin contact.

Health hazards: exposure to natural graphite can produce progressive or disabling pneumoconiosis. Symptoms include headache, cough, depression, reduced appetite, difficulty breathing, and black sputum.

Environmental hazard: dust, ash

Explosion hazard: none

Part 4: first aid measures

Skin contact: rinse with plenty of water. Remove and isolate contaminated clothing and shoes. Keep the patient warm and quiet.

Eye contact: rinse with water.

Inhalation: remove victim to fresh air and give artificial respiration. If the patient has stopped breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: delayed reaction may result from inhalation, ingestion or skin contact. Ensure that medical personnel know the personal protection knowledge related to the substance and pay attention to their own protection.

Part 5: fire control measures

Dangerous properties: react with strong oxidants such as fluorine, chlorine trifluoride, and potassium peroxide.

Harmful combustion product: carbon dioxide.

Fire extinguishing method: combustible solid. If the substance or contaminated fluid enters the waterways, notify downstream users of potential water contamination and notify local health and fire officials and pollution control departments. Use dry powder, foam and carbon dioxide to extinguish fire.

Part 6: leakage emergency treatment

Emergency treatment: seal the leakage point.

Part 7: handling and storage

Operation attention: pay attention to dust.

Storage precautions: avoid contact with strong oxides (fluorine, chlorine difluoride, potassium pertetrachloride).

Part 8: contact control/personal protection

Engineering control: no special control is necessary.

Respiratory protection: provide dust masks with appropriate filters.

NIOSH 12. 5mg/m³: dustproof respirator.

25mg/m³: dustproof respirator and supply respirator in addition to dedicated respirator and one fourth nasal mask respirator.

62. 5mg/m³: powered air purification respirator with dust filter layer, continuous air supply respirator.

125mg/m³: high-efficiency filter layer anti-particle comprehensive mask respirator, power-driven high-efficiency filter layer mask close to the face of the air purification respirator, mask close to the face of the continuous air supply respirator, self-contained respirator.

1250mg/m³: air supply positive pressure full hood respirator.

Emergency or planned entry into unknown concentration areas, or in the immediate threat to life or health conditions: self-propelled positive pressure comprehensive cover breathing apparatus, supply positive pressure comprehensive cover breathing apparatus supplemented by auxiliary self-propelled positive pressure breathing apparatus. Escape: high efficiency filter layer particle - proof comprehensive cover respirator, self - contained escape respirator.

Eye protection: goggles will do

Body protection: work clothes are ok (without special protection)

Hand protection: work gloves are enough

Other protection: regular examination of respiratory system, lung and cardiovascular system.

Part 9: physical and chemical properties

Appearance and properties: soft black powder, crystalline carbide. Touch grease, no smell.

PH: 4 ~ 7

Melting point (°C) : 3850±50°C

Boiling point (°C) : 4250°C

Main ingredient: Graphite

Solubility: insoluble in water.

Main application: rubber, powder metallurgy, coating, etc.

Part 10: stability and reactivity

Stability: stable
Forbidden ingredients: none
Polymerization hazard: none

Part 11: toxicological data

Irritant: none
Sensitization: none
Mutagenesis: none
Teratogenicity: none
Carcinogenicity: none

Part 12: ecological information

Ecological toxicity: none
Biodegradability: none
Non-biodegradability: none
Bioaccumulation or bioaccumulation: none
Other harmful effects: none

Part 13: waste disposal

Waste disposal method: classified and unified treatment.
Note for waste: dust prevention.

Part 14: transportation information

D.O.T. Classification: Classified Non DG.
Packing category: general.
Packing method: outer waterproof woven bag, inner compound moisture-proof bag.
Road transportation: Not hazardous for transport.
IATA Classification: Not hazardous for transport
IMDG Classification: Not hazardous for transport
Marine Pollutant or potential Marine Pollutant: No

Part 15: regulatory information

Regulatory information: refer to relevant national requirements

Part 16: other information

To the best of our knowledge, the information contained herein is accurate. However, MGD does not assume any liability whatsoever for the accuracy or completeness of the information herein. Final determination of suitability of any material is the sole responsibility of the user. All material may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Filling department: Shenzhen City Magaoding Chemistry Co., LTD

Tabulation date: May 30, 2025

Other information: none