



Material Safety Data Sheet  
Graphite Powder

MSDS# 10561

Section 1 - Chemical Product and Company Identification

MSDS Name: Graphite Powder  
Catalog Numbers: G67-500  
Synonyms: Black lead; crystallized carbon; mineral carbon; plumbago; CI 77265.  
Company Identification: Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
For information in the US, call: 201-796-7100  
Emergency Number US: 201-796-7100  
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

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Risk Phrases:

CAS#: 7782-42-5  
Chemical Name: GRAPHITE  
%: >99  
EINECS#: 231-955-3  
Hazard Symbols:

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Risk Phrases:

CAS#: 14808-60-7  
Chemical Name: Quartz  
%: <1  
EINECS#: 238-878-4  
Hazard Symbols:

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Text for R-phrases: see Section 16

Hazard Symbols: None listed  
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! May cause eye and skin irritation. May cause respiratory and digestive tract irritation. Contains trace amounts of quartz which may lead to fibrotic lung disease, silicosis or cancer. Target Organs: Lungs.

Potential Health Effects

Eye: Causes eye irritation. May cause conjunctivitis.  
Skin: May cause skin irritation.  
Ingestion: Ingestion of large amounts may cause gastrointestinal irritation.  
Inhalation: Dust is irritating to the respiratory tract.  
Chronic: Prolonged exposure to respirable crystalline quartz may cause delayed lung injury/fibrosis (silicosis).

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

#### Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dust can be an explosion hazard when exposed to heat or flame. Can be easily ignited and burns vigorously.

Extinguishing Media: For small fires, use water spray, dry chemical, carbon dioxide or chemical foam. Use water spray to cool fire-exposed containers.

Autoignition Temperature: 730 deg C ( 1,346.00 deg F)

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 1; flammability: 1; instability: 0;

#### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions.

#### Section 7 - Handling and Storage

Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage: Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Keep from contact with oxidizing materials.

#### Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
GRAPHITE	2 mg/m3 (respirable fraction, all forms except graphite fibers)	2.5 mg/m3 TWA (respirable dust) 1250 mg/m3 IDLH	none listed
Quartz	0.025 mg/m3 (respirable fraction)	0.05 mg/m3 TWA (respirable dust) 50 mg/m3 IDLH (respirable dust)	none listed

OSHA Vacated PELs: GRAPHITE: 2.5 mg/m3 TWA (respirable dust) Quartz: 0.1 mg/m3 TWA (respirable dust)

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face

protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: green, blue, steel gray or black

Odor: odorless

pH: Not available

Vapor Pressure: Negligible.

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not applicable.

Boiling Point: 4200 deg C ( 7,592.00°F)

Freezing/Melting Point: 3652.2-3697.2 deg C

Decomposition Temperature: Not available

Solubility in water: Insoluble in water.

Specific Gravity/Density: 2.09-2.25

Molecular Formula: C

Molecular Weight: 12

#### Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, ignition sources, dust generation, moisture, excess heat.

Incompatibilities with Other Materials: Not available

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

#### Section 11 - Toxicological Information

RTECS#: CAS# 7782-42-5: MD9659600  
CAS# 14808-60-7: VV7330000

LD50/LC50: RTECS: Not available. RTECS: Not available.

GRAPHITE - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Carcinogenicity: Quartz - ACGIH: A2 - Suspected Human Carcinogen California: carcinogen, initial date 10/1/88 (airborne particles of respirable size) NTP: Known carcinogen IARC: Group 1 carcinogen

Other: See actual entry in RTECS for complete information.

#### Section 12 - Ecological Information

Not available

#### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

#### Section 14 - Transport Information

US DOT

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 7782-42-5: 0

CAS# 14808-60-7: Not available

Canada

CAS# 7782-42-5 is listed on Canada's DSL List

CAS# 14808-60-7 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2A

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 7782-42-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 14808-60-7 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 7782-42-5 is listed on the TSCA Inventory.

CAS# 14808-60-7 is listed on the TSCA Inventory.

**REVIEWED**

Section 16 - Other Information

MSDS Creation Date: 12/12/1997

Revision #6 Date 7/20/2009

DATE: July 11/2012

*C. Rutherford*

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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