





GARDENA, CA  
NEW BRUNSWICK, NJ

# Material Safety Data Sheet

<b>NFPA</b> 	<b>HMS</b> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Health Hazard</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Fire Hazard</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Reactivity</td> <td style="text-align: center;">0</td> </tr> </table>	Health Hazard	1	Fire Hazard	1	Reactivity	0	<b>Personal Protective Equipment</b>  See Section 15.
Health Hazard	1							
Fire Hazard	1							
Reactivity	0							

<b>Section 1. Chemical Product and Company Identification</b>		<i>Page Number: 1</i>
<b>Common Name/ Trade Name</b> <b>Carbon, Graphite powder</b>		<b>CAS#</b> 7782-42-5
<b>Manufacturer</b> ProChem, Inc. 826 Roosevelt Rd Rockford, IL 61109		<b>RTECS</b> MD9659600 <b>TSCA</b> TSCA 8(b) inventory: Graphite
<b>Commercial Name(s)</b>	Not available.	<b>CI#</b> Not available.
<b>Synonym</b>	Not available.	<b>IN CASE OF EMERGENCY</b> <b>CHEMTREC (24hr) 800-424-9300</b>  <b>815-398-1788</b>
<b>Chemical Name</b>	Graphite	
<b>Chemical Family</b>	Not available.	
<b>Chemical Formula</b>	C	
<b>Supplier</b>		

<b>Section 2. Composition and Information on Ingredients</b>					
		<i>Exposure Limits</i>			
<b>Name</b>	<b>CAS #</b>	<b>TWA (mg/m<sup>3</sup>)</b>	<b>STEL (mg/m<sup>3</sup>)</b>	<b>CEIL (mg/m<sup>3</sup>)</b>	<b>% by Weight</b>
1) Graphite	7782-42-5	2.5			100
<b>Toxicological Data on Ingredients</b>		<b>Graphite</b> LD50: Not available. LC50: Not available.			

<b>Section 3. Hazards Identification</b>	
<b>Potential Acute Health Effects</b>	Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
<b>Potential Chronic Health Effects</b>	<b>CARCINOGENIC EFFECTS:</b> Not available. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. The substance is toxic to upper respiratory tract. The substance may be toxic to cardiovascular system. Repeated or prolonged exposure to the substance can produce target organs damage.

**Section 4. First Aid Measures**

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin Contact	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
Serious Skin Contact	Not available.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation	Not available.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion	Not available.

**Section 5. Fire and Explosion Data**

Flammability of the Product	May be combustible at high temperature.
Auto-Ignition Temperature	Not available.
Flash Points	CLOSED CUP: Higher than 93.3°C (200°F).
Flammable Limits	Not available.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence of open flames and sparks, of heat, of oxidizing materials.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of moisture.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards	It will ignite on contact with chlorine trifluoride and fluorine. Graphite dust may ignite on contact with air. May re-ignite after fire is extinguished.
Special Remarks on Explosion Hazards	Material in powder form, capable of creating an explosion on contact with water.

**Section 6. Accidental Release Measures**

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

**Section 7. Handling and Storage**

<b>Precautions</b>	Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Keep away from incompatibles such as oxidizing agents.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23°C (73.4°F).

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
<b>Personal Protection</b>	Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>Exposure Limits</b>	TWA: 2 (mg/m <sup>3</sup> ) from ACGIH (TLV) [United States] [1999] Inhalation Respirable. TWA: 3 (mg/m <sup>3</sup> ) [Australia] Inhalation TWA: 2.5 (mg/m <sup>3</sup> ) from NIOSH Inhalation Respirable. TWA: 2.5 (mg/m <sup>3</sup> ) from OSHA (PEL) [United States] Inhalation Respirable. TWA: 10 [United Kingdom (UK)] Inhalation Total. TWA: 4 [United Kingdom (UK)] Respirable.  Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Solid. (Crystalline solid.)	<b>Odor</b>	Odorless.
<b>Molecular Weight</b>	12.01 g/mole	<b>Taste</b>	Tasteless.
<b>pH (1% soln/water)</b>	Not applicable.	<b>Color</b>	Black
<b>Boiling Point</b>	Not available.		
<b>Melting Point</b>	3650°C (6602°F)		
<b>Critical Temperature</b>	681°C (1257.8°F)		
<b>Specific Gravity</b>	2.25 (Water = 1)		
<b>Vapor Pressure</b>	Not applicable.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Water/Oil Dist. Coeff.</b>	Not available.		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	Not available.		
<b>Solubility</b>	Insoluble in cold water.		

**Section 10. Stability and Reactivity Data**

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat, incompatible materials.
Incompatibility with various substances	Highly reactive with oxidizing agents.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Reacts vigorously with liquid potassium, and potassium peroxide. If graphite contacts liquid potassium, rubidium or caesium at 300 C, intercalation compounds may be formed.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

**Section 11. Toxicological Information**

Routes of Entry	Inhalation. Ingestion.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	Causes damage to the following organs: upper respiratory tract. May cause damage to the following organs: cardiovascular system.
Other Toxic Effects on Humans	Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on other Toxic Effects on Humans	Nuisance dust. Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Dust causes eye irritation. Inhalation: May be harmful if inhaled. Dust causes respiratory tract and mucous membrane irritation. Ingestion: May be harmful if swallowed. May cause gastrointestinal (digestive) tract irritation with nausea and vomiting. Chronic Potential Health Effects: Inhalation of high concentrations of graphite dust over prolonged periods of time may cause pneumoconiosis. Symptoms can include cough, shortness of breath, and decrease of pulmonary function. Preexisting pulmonary disorders such as emphysema may possibly be aggravated by prolonged exposure to high concentrations of graphite dust. This toxicology of this substance has not been fully investigated.

**Section 12. Ecological Information**

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation	Not available.

**Section 13. Disposal Considerations**

**Waste Disposal** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

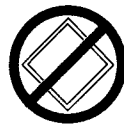
**Section 14. Transport Information**

**DOT Classification** Not a DOT controlled material (United States).

**Identification** Not applicable.

**Special Provisions for Transport** Not applicable.

**DOT (Pictograms)**



**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations** Rhode Island RTK hazardous substances: Graphite  
 Pennsylvania RTK: Graphite  
 Minnesota: Graphite  
 Massachusetts RTK: Graphite  
 Tennessee: Graphite  
 TSCA 8(b) inventory: Graphite

**California Proposition 65 Warnings**

**Other Regulations** EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

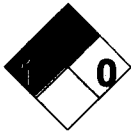
**Other Classifications** **WHMIS (Canada)** CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

**DSCL (EEC)** This product is not classified according to the EU regulations. Not applicable.

**HMIS (U.S.A.)**

Health	1
Fire Hazard	1
Reactivity	0
Personal Protection	E

**National Fire Protection Association (U.S.A.)**

Health  Flammability  
 Reactivity  
 Specific hazard

**WHMIS (Canada) (Pictograms)**



**DSCL (Europe) (Pictograms)**



**TDG (Canada)  
(Pictograms)**



**ADR (Europe)  
(Pictograms)**



**Protective Equipment**



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Safety glasses.

**Section 16. Other Information**

References Not available.

Other Special Considerations Not available.

**PREPARED JUNE 2006**

**Notice to Reader**

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, ProChem Chemicals Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*