



MATERIAL SAFETY DATA SHEET  
COMPLIES WITH 29 CFR 1910.1200.  
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 04-25-96

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## CHEMICAL IDENTITY

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LABEL IDENTITY	<b>CARBON</b>
CHEMICAL NAME/SYNONYMS	<b>GRAPHITE</b>
FORMULA	<b>C</b>
CHEMICAL FAMILY	<b>CARBON</b>
CAS REGISTRY NUMBER	<b>7782-42-5, LISTED IN THE TSCA INVENTORY</b>
HAZARDOUS INGREDIENTS	<b>GRAPHITE</b>
%: <b>100</b>	TLV: <b>5mg/m3</b> OSHA/PEL: <b>15mg/M3</b>

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## PHYSICAL AND CHEMICAL PROPERTIES

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COLOR, FORM AND ODOR	<b>Black powder, no odor</b>
BOILING POINT	<b>NA</b>
DENSITY (gm/cc)	<b>ND</b>
VAPOR PRESSURE @ 20°	<b>NA</b>
% VOLATILE BY VOLUME (%)	<b>NA</b>
REACTION WITH WATER	<b>None</b>
EVAPORATION RATE (H2O=1)	<b>NA</b>
SOLUBILITY IN WATER	<b>Negligible</b>
MELTING POINT	<b>NA</b>

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## FIRE AND EXPLOSION HAZARD DATA

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FLASH POINT	<b>None</b>
AUTOIGNITION TEMPERATURE (°C)	<b>None</b>
FLAMMABILITY	<b>Non-flammable</b>
EXTINGUISHING MEDIA	<b>Use water, CO<sub>2</sub>, sand</b>
SPECIAL FIRE FIGHTING PROCEDURES	<b>SCBA</b>
UNUSUAL FIRE & EXPLOSION HAZARDS	<b>Graphite and carbon dusts are normally not explosive</b>



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### HEALTH HAZARD INFORMATION

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TOXICITY DATA      **Scu-rat TDLO = 167mg/kg (8D preg)**      **Inv-mus LD50 = 440mg/kg**

HMIS RATING:

HEALTH: **1**    FLAMMABILITY: **0**    REACTIVITY: **0**    PERSONAL PROTECTION: **B**

ROUTES OF ENTRY

INHALATION:      **Yes**

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **Individuals with pre-existing chronic respiratory impairments or with serum antitrypsin deficiency may be at an increased risk of pneumoconiosis.**

EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: **prolonged & repeated over-exposure may effect breathing efficiency or lead to benign pneumoconiosis.**

DERMAL: **slight irritant under constant exposure**

EYE: **at dust levels, it can cause irritation.**

OTHER: **can cause conjunctivitis epithelial hyperplasia of cornea as well as eczematous, inflammation of eyelids.**

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CARCINOGENICITY: **NA**    NTP: **ND**    IARC MONOGRAPHS: **ND**    OSHA REGULATE: **ND**

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EMERGENCY FIRST AID PROCEDURES:

INGESTION: **none normally required**

INHALATION: **Remove to fresh air, avoid further inhalation**

SKIN CONTACT: **Wash affected area with soap and water**

EYE CONTACT: **Flush eyes for at least 15 minutes with lukewarm water**

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### REACTIVITY DATA

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STABILITY

**Stable**

CONDITIONS CONTRIBUTING TO UNSTABILITY

**ND**

INCOMPATIBILITY (MATERIALS TO AVOID)

**None known**

HAZARDOUS DECOMPOSITION PRODUCTS

**CO, CO2**

HAZARDOUS POLYMERIZATION

**Will Not Occur**

CONDITIONS TO AVOID

**ND**



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### SAFE HANDLING AND USE

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STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

**Sweep up or vacuum. Avoid raising dust.**

WASTE DISPOSAL METHOD:

**Not regulated as a hazardous waste under RCRA. It can be disposed of with normal refuse.**

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### SPECIAL PROTECTIVE INFORMATION

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RESPIRATORY PROTECTION	<b>NIOSH respirator approved for dusts</b>
LOCAL EXHAUST	<b>Maintain below PEL</b>
MECHANICAL (general)	<b>ND</b>
SPECIAL	<b>ND</b>
OTHER	<b>ND</b>
PROTECTIVE GLOVES	<b>Normally not necessary</b>
EYE PROTECTION	<b>Safety glasses</b>
OTHER PROTECTIVE EQUIPMENT	<b>ND</b>

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### SPECIAL PRECAUTIONS

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PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE:

**Store in a dry area.**

TRANSPORTATION REQUIREMENTS	DOT CLASS:	<b>NC</b>
	UN NUMBER:	<b>NC</b>
	IMCO CLASS:	<b>NC</b>
	OTHER:	

PRECAUTIONARY LABELING **NONE**

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THE ABOVE INFORMATION IS ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, SINCE DATA, SAFETY STANDARDS AND GOVERNMENT REGULATIONS ARE SUBJECT TO CHANGE THE CONDITIONS OF HANDLING AND USE, OR MISUSE ARE BEYOND OUR CONTROL, **ANGSTROM SCIENCES** MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR THE RELIANCE THEREON. USER SHOULD SATISFY HIMSELF THAT HE HAS ALL CURRENT DATA RELEVANT TO HIS PARTICULAR USE.

**NA= NOT APPLICABLE**

**ND= NO DATA FOUND**