Section 1

SAFETY DATA SHEET

Chemical Product and Company Identification

5100 West Henrietta Rd

PO Box 92912

Boreal Science

399 Vansickle Road

St. Catherines, Ontario

GENERAL STORAGE CODE GREEN

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CHEMTREC 24 Hour Emergency USA Phone Number (800) 424-9300 For laboratory and industrial use only.

Not for drug, food or household use.

Rochester, NY 14692-9012 Tel: (800) 962-2660 L2S 3T4 Canada Tel: (800) 387-9393 GRAPHITE Product Synonyms Graphite Powder / Natural Graphite / Carbon, Black Lead Section 2 **Hazards Identification** This substance or mixture has not been classified as hazardous according Supplemental information: to the Globally Harmonized System (GHS) of Classification and Labeling of Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly Chemicals. after handling. Get medical attention if you feel unwell. Signal word: None required Pictograms: No symbol required Target organs: Respiratory system, Cardiovascular system GHS Classification: None required GHS Label information: Hazard statement: None required Precautionary statement: None required

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3	Composition / Information on Ingredients				
Chemical Name		CAS #	%	EINECS	
Graphite, natural		7782-42-5	100%	231-955-3	
May contain: Silica, (as quartz)		14808-60-7	1.5-4.0%	238-878-4	

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 **Fire Fighting Measures**

Suitable Extinguishing Media: Dry chemical, CO_2 , water spray or regular foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Graphite is a conductor of electricity. Use caution when handling in areas where contact with eletrical circuitry is possible. At temperatures above 1500°C, graphite reacts with substances containing oxygen, including water and carbon dioxide. In case of intensely hot fire events, use sand to cover and isolate graphite...

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways

Containment and Cleanup: Recover for reuse if not contaminated. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8	Exposure Controls / Personal Protection				
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
Exposure Limits.	Graphite, natural	TWA: 2 R mg/m ³	TWA: 15 mppcf	TWA: 2.5 mg/m ³	

Engineering controls: Facilities storing or utilizing this material should be equipped with an evewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9 Physical & Chemical Properties								
Appearance: Solid. Gray to black powder Odor: No odor Odor threshold: Data not available pH: Data not available Melting / Freezing point: Sublimes @ 3652°C Boiling point: Data not available Flash point: Data not available	Evaporation rate (=1): Data not available Flammability (solid/gas): Data not available Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): 0 mmHg Vapor density (Air = 1): Data not available Relative density (Specific gravity): 2.26 Solubility(ies): Insoluble in water	Partition coefficient: Data not available Auto-ignition temperature: >500°C (932°F) Decomposition temperature: Oxidizes @ >400°C Viscosity: Data not available Molecular formula: C Molecular weight: 12.01						
Section 10 Stability & Reactivity								

Chemical stability: Stable

Hazardous polymerization: Will not occur.

Conditions to avoid: Stable under normal and fire conditions. Avoid contact with incompatible material.

Incompatible materials: Strong oxidizers, such as fluorine, chlorine trifluoride and potassium peroxide.

Hazardous decomposition products: Carbon oxides.

Section 11 **Toxicological Information**

Acute toxicity: Data not available Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available Carcinogenity: Data not available NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. IARC classified: Group 1: Carcinogenic to humans. [Silica dust, in the form of quartz] OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Prop 65: A WARNING! This product can expose you to a chemical, crystalline silica, which is known to the State of California to cause cancer. Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available Potential health effects: Inhalation: Inhalation of dusts may cause irritation, cough, black sputum, and decreased pulmonary function. Ingestion: Not expected to be an ingestion hazard. Skin: Prolonged contact may cause drying of skin. Eyes: Contact with eyes may cause mechanical irritation. Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards. Additional information: RTECS #: MD9659600 Section 12 **Ecological Information** Toxicity to fish: No data available Toxicity to daphnia and other aquatic invertebrates: No data available Toxicity to algae: No data available Bioaccumulative potential: No data available Persistence and degradability: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal Section 13 **Disposal Considerations** These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency. Section 14 Transport Information (US DOT / CANADA TDG) UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: No **Exceptions:** Not applicable 2016 ERG Guide # Not applicable Section 15 **Regulatory Information** A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. CERLCA (RQ) DSL NDSL Component TSCA RCRA code CA Prop 65 Graphite Listed Not listed Not listed Listed Not listed MARNING -Cancer and Reproductive Harm - www.P65Warnings.ca.gov. Section 16 **Other Information** The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure,