

#### **SAFETY DATA SHEET**

**Section 1: IDENTIFICATION** 

**Product Identifier:** Graphite Powder (3724)

Other Means of Identification:

Carbon, Graphite

Product Family:

Lubricant

**Recommended Use:** 

**Drilling Fluid Additive** 

Supplier:

Bri-Chem Supply Ltd. 27075 Acheson Road

Acheson, AB T7X 6B1

780-962-9490

24 Hour Emergency:

CHEMTREC (800) 424-9300, 24/7

Section 2: HAZARD(S) IDENTIFICATION

Classification:

Not classified under any hazard class

**Label Elements** 

Not applicable

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

**Chemical Name** 

CAS No.

%

Other Identifiers

**Other Names** 

Graphite

7782-42-5

1102-42-3

>99

**Section 4: FIRST-AID MEASURES** 

**First-Aid Measures** 

Inhalation:

Move to fresh air. Apply oxygen or artificial respiration if required. If breathing difficulties or distress continues, obtain

medical attention.

**Skin Contact:** 

Remove and wash contaminated clothing before re-use.

Immediately wash thoroughly with soap and plenty of water. Do not rub the skin. If irritation occurs and/or persists, seek

medical attention.

Eye Contact:

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water while holding the eyelid(s) open for 15 minutes. Do not rub the eye as mechanical abrasion due to the dust may be damaging to the cornea. If eye irritation persists,

get medical advice or attention.

Ingestion:

DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious or convulsing victim. Get medical attention if

symptoms develop or persist.



#### **SAFETY DATA SHEET**

### Section 5: FIRE-FIGHTING MEASURES

**Extinguishing Media** 

Suitable Extinguishing

Media:

Use foam, carbon dioxide, dry chemical or water spray. A fog

spray is recommended if water is used.

Unsuitable Extinguishing

Media:

Avoid high-pressure water stream as this may spread burning

powder; burning powder will float.

**Specific Hazards Arising** from The Product:

Autoignition Temperature: 730°C. Can be easily ignited and burns vigorously. Dust can be an explosion hazard when exposed to heat or flame. Irritating and toxic fumes and gases.

**Special Protective Equipment and** Precautions for Fire-Fighters:

Self-contained breathing apparatus required for fire-fighting personnel. Firefighters should wear a full-body encapsulating chemical protective suit with positive-pressure self-contained

breathing apparatus (SCBA).

# Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions. **Protective Equipment and Emergency Procedures:** 

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Avoid dust generation. Ensure adequate ventilation. Eliminate all ignition sources.

Environmental Precautions:

It is good practice to prevent spilled material and/or runoff from

entering waterways, drains and sewers.

**Methods and Materials for Containment and Cleaning** 

Up:

Stop or reduce leak if safe to do so. Avoid generating dust. Small spills: Should be vacuumed when possible. Dry sweeping is not recommended. A vacuum with HEPA filtration is

recommended. If necessary, light water spray will reduce dust

for sweeping.

Large spills: May be shoveled into containers. Use appropriate

personal protective equipment.

### **Section 7: HANDLING AND STORAGE**

**Precautions for Safe** Handling:

Avoid generating dusts. DO NOT breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin and eyes. Practice reasonable caution and personal cleanliness. Dust collectors should be used in all work areas to trap airborne dust. Handle in accordance with good industrial hygiene and safety practice. It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling.

**Conditions for Safe** 

Storage:

Keep container tightly closed. Store in a cool, dry place, away

from ignition sources.



#### **SAFETY DATA SHEET**

#### Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**ACGIH:** 2 mg/m³ (respirable fraction, all forms except graphite fibres)

NIOSH: 2.5 mg/m³ (respirable fraction)

1250 mg/m<sup>3</sup> IDLH

ACHIG® = American Conference of Governmental Industrial Hygienists

**NIOSH =** The National Institute for Occupational Safety and Health

**IDLH** = Immediately dangerous to life or health

**Appropriate Engineering** 

Controls:

Use local exhaust ventilation, process enclosure or other

engineering controls to maintain concentration of airborne dust

below TLV.

Individual Protection Measures

**Eye/Face Protection:** Wear chemical safety goggles when contact with dust is possible.

Do not wear contact lenses when handling this material. Ensure an

eyewash station is available in immediate work area.

**Skin Protection:** Wear impervious protective clothing including boots, gloves, lab

coat, apron or coverall, as appropriate, to prevent skin contact. Wash contaminated clothing with soap and water, dry thoroughly

before re-use.

Respiratory Protection: Suggest NIOSH/MESA-approved dust mask or approved respirator

with filters for silica-bearing dust.

### **Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Basic Physical and Chemical Properties** 

**Appearance:** Grey – black powder

Odour: Odourless

pH: Not available

**Melting Point/Freezing Point:** 365.2 – 3697.2°C (melting)

Initial Boiling Point/Range: 4200°C

Relative Density (Water = 1): 2.09 - 2.25

Solubility: Insoluble in water

**Auto-ignition Temperature:** > 140°C

**Decomposition** Not available

Temperature:



**SAFETY DATA SHEET** 

Other Information

**Physical State:** Solid

Molecular Formula: C

Molecular Weight: 12

**Section 10: STABILITY AND REACTIVITY** 

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous** 

Reactions:

Hazardous polymerization will not occur.

**Conditions to Avoid:** Incompatible materials. Heat. Generation of dust. Strong

oxidizers.

**Incompatible Materials:** Strong oxidizing agents (e.g perchloric acid).

**Hazardous Decomposition** 

Products:

Carbon monoxide and carbon dioxide.

Section 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation

**Acute Toxicity:** LD50 Oral Rat: > 2,000 mg/kg

Skin Corrosion/Irritation: May cause skin irritation

Serious Eye Causes eye irritation. May cause conjunctivitis.

Damage/Irritation:

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation: Dust is irritating to the respiratory tract.

STOT (Specific Target Organ

Toxicity) - Repeated

**Exposure:** 

Prolonged exposure to respirable crystalline guartz may cause

delayed lung injury/fibrosis (silicosis).

Carcinogenicity: IARC, NTP, ACGIH, OSHA and CA Prop 65 do not list

Graphite as carcinogenetic.

No information was located for: Aspiration Hazard, Respiratory and/or Skin Sensitization, Development of Offspring, Sexual Function and Fertility, Effects on or via Lactation, Germ

Cell Mutagenicity, Interactive Effects.

Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** No ecotoxicity or environmental date data available.

Section 13: DISPOSAL CONSIDERATIONS

**Disposal Methods:** Dispose of in accordance with federal, state and local

government regulations. Do not flush to surface water or

sanitary sewer system.



### **SAFETY DATA SHEET**

#### Section 14: TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Special Precautions: Not applicable

Transport in Bulk According Not applicable

to Annex II of MARPOL 73/78

and the IBC Code:

#### **Section 15: REGULATORY INFORMATION**

# Safety, Health and Environmental Regulations

Canada

WHMIS 1988 Classification: Class D2A – Very Toxic

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

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL):

IISΔ

Toxic Substances Control Act (TSCA) Section 8(b):

Listed on the DSL

Lised on the TSCA Inventory

#### **Section 16: OTHER INFORMATION**

NFPA Rating Health – 1 Flammability – 1 Instability – 0

#### Disclaimer:

The information contained herein is based on data available to us and is believed to be true and accurate. However, no guarantee or warranty is provided, expressed or implied, by the company or its subsidiaries regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained from the use thereof. Since the use of this product is within the exclusive control of the user, we do not assume any responsibility and expressly disclaim any liability for any use of this product. It is the user's responsibility to determine the conditions of safe use, storage, and disposal of the product. Compliance with all applicable federal, provincial, and local regulations remains the responsibility of the user.

Prepared by: Bri-Chem Supply Ltd.

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