

### Section 1: IDENTIFICATION

#### 1.1: Identification

**Product Form:** Substance  
**Trade Name:** LDI Natural Flake Graphite

#### 1.2: Recommended Use & Restrictions on Use

**Recommended Use:**

- Electrical and thermal conductive additive
- Friction modifier
- Carbon carrier
- Lubricant
- Refractories

**Restrictions on Use:** No information available

#### 1.3: Supplier

**Northern Graphite Corporation**  
 585 chemin du Graphite  
 Lac des Iles, Quebec, Canada J0W 1J0  
 T +1-819-597-2911  
 clients@northerngraphite.com

#### 1.4: Emergency Telephone Number

For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak, Fire, Exposure, or Accident

**Call CHEMTREC Day or Night**  
**Within USA and Canada: 1-800-424-9300**  
**Outside USA and Canada: +1 703-527-3887 (collect calls accepted)**

### Section 2: HAZARD(S) IDENTIFICATION

#### 2.1: Classification of the Substance or Mixture

**GHS US classification:** Not classified

#### 2.2: GHS Label elements, including precautionary statements

**GHS US Labeling:**

Hazard pictograms (GHS US): None  
 Signal word (GHSUS): None  
 Hazard statements (GHS US): Not applicable  
 Precautionary statements (GHS US): No information available.

#### 2.3: Other Hazards that do not result in classification

Dust can form an explosive mixture with air.

#### 2.4: Unknown acute toxicity (GHS US)

No information available.

### Section 3: COMPOSITION | INFORMATION ON INGREDIENTS

#### 3.1: Substances

**Name:** Graphite  
**Product Identifier: (CAS-No.) 7782-42-5**  
**%: > 93**

**Full text of hazard classes and H-statements:** see section 16

#### 3.2: Mixtures

Not Applicable

#### Composition: Information on other ingredients

ANALYSIS	PRODUCT				CAS #
Graphite	94%	95%	96%	97%	7782-42-5
SiO2	2.6%	2.2%	1.8%	1.3%	7631-86-9
Al2O3	0.8%	0.6%	0.5%	0.4%	1344-28-1
Fe2O3	1.0%	0.9%	0.6%	0.5%	1309-37-1
MgO	0.5%	0.4%	0.3%	0.2%	1309-48-4
CaO	1.0%	0.8%	0.7%	0.5%	1305-78-8
K2O	0.1%	0.1%	0.1%	0.1%	12136-45-7
<b>Totals</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	

## Section 4: FIRST AID MEASURES

### 4.1: Description of First Aid Measures

**First-aid measures general:** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**First-aid measures after inhalation:** Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor

**First-aid measures after skin contact:** Wash skin with mild soap and water. If irritation persists, consult a doctor.

**First-aid measures after eye contact:** Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**First-aid measures after ingestion:** Rinse mouth. Do not induce vomiting. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

### 4.2: Most Important Symptoms & Effects (acute & delayed)

**Symptoms/Effects:** No information available

### 4.3: Immediate Medical Attention & Special Treatment, if Necessary

Treat symptomatically

## Section 5: FIRE-FIGHTING MEASURES

### 5.1: Suitable (and Unsuitable) Extinguishing Media

**Suitable extinguishing media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable extinguishing media:** No information available.

### 5.2: Specific Hazards Arising from the Chemical

**Reactivity in case of fire:** No information available.

**Hazardous decomposition products in case of fire:** Toxic fumes may be released, such as carbon monoxide, carbon dioxide.

### 5.3: Special Protective Equipment and Precautions for Fire Fighters

**Protection during fire fighting:** Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1: Personal Precautions, Protective Equipment & Emergency Procedures

**General Measures:** Evacuate personnel to a safe area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure adequate ventilation, especially in confined areas.

**Personal Precautions, Protective Equipment and Emergency Procedures:** Use personal protective equipment as required

## Section 6: ACCIDENTAL RELEASE MEASURES (continued)

### 6.1.1: For Non-emergency Personnel

**Protective Equipment:** Wear recommended personal protective equipment.

**Emergency procedures:** Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Do not eat, drink or smoke during use. Wash thoroughly after handling.

### 6.1.2: For Emergency Responders

**Protective Equipment:** Do not attempt to take action without suitable protective equipment. For further information refer to **Section 8: "Exposure controls/personal protection"**.

## 6.2: Environmental Precautions

**General Measures:** Avoid release to the environment. Prevent entry to sewers and public waters. Advise local authorities if considered necessary.

## 6.3: Methods & Material for Containment & Cleaning Up

**Methods for Cleaning Up:** Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

**Other information:** Dispose of materials or solid residues at an authorized site.

## 6.4: Reference to Other Sections

For further information refer to section 13.

## Section 7: HANDLING & STORAGE

### 7.1: Precautions for Safe Handling

**Precautions for Safe Handling:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take action to prevent static discharges. Use personal protective equipment as required.

**Hygiene Measures:** Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust.

**Local and General Ventilation:** Ensure adequate ventilation, especially in confined areas.


### 7.2: Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Keep container tightly closed. Containers which are opened should be properly resealed and kept upright to prevent leakage. Keep only in original container.

**Storage temperature:** No information available

**Material used in packaging/containers:** No information available

**Incompatible materials:** Fluorine, chlorine trifluoride.

**Section 8: EXPOSURE CONTROLS | PERSONAL PROTECTION****8.1: Control Parameter****GRAPHITE (7782-42-5)****USA - ACGIH - Occupational Exposure Limits****ACGIH TWA (mg/m<sup>3</sup>):** 2 mg/m<sup>3</sup> (all forms except graphite fibers - respirable particulate matter)**USA - OSHA - Occupational Exposure Limits****OSHA PEL (TWA) (mg/m<sup>3</sup>):** 15 mg/m<sup>3</sup> (synthetic-total dust) | 5 mg/m<sup>3</sup> (synthetic-respirable fraction)**USA - IDLH - Occupational Exposure Limits****US IDLH (mg/m<sup>3</sup>):** 1250 mg/m<sup>3</sup>**USA - NIOSH - Occupational Exposure Limits****NIOSH REL (TWA) (mg/m<sup>3</sup>):** 2.5 mg/m<sup>3</sup> (natural-respirable dust)**8.2: Appropriate Engineering Controls****Appropriate Engineering Controls:** Remove all sources of ignition. Ensure good ventilation of the workstation.**Environmental Exposure Controls:** Avoid release to the environment.**8.3: Individual Protection Measures | Personal Protective Equipment** **Hand Protection:** Protective gloves (EN 374) | Appropriate Material: rubber **Eye Protection:** Safety glasses with side shields (EN 166) **Skin & Body Protection:** Wear suitable protective clothing **Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment. FFP2SL (EN 149)

## Section 9: PHYSICAL & CHEMICAL PROPERTIES

### 9.1: Information on Basic Physical & Chemical Properties

**Physical State:** Solid

**Appearance:** Powder

**Color:** Grey to Black

**Odor:** Odorless

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** Ca. 3500 °C

**Freezing Point:** No data available

**Boiling Point:** No data available

**Flash Point:** No data available

**Relative Evaporation Rate (butyl acetate=1):** No data available

**Flammability (solid, gas):** Non flammable

**Vapor Pressure:** < 0.01 mbar (20 °C)

**Relative Vapor Density at 20 °C:** No data available

**Relative Density:** No data available

**Specific Gravity / Density:** 2.1 - 2.3 g/cm<sup>3</sup> (25 °C)

**Solubility:** < 0.001 g/L

**Partition Coefficient n-octanol/water (Log Pow):** No data available

**Auto-ignition Temperature:** > 600 °C (dispersed dust cloud) | 365 °C (dispersed dust)

**Decomposition Temperature:** No data available

**Viscosity, Kinematic:** No data available

**Viscosity, Dynamic:** No data available

**Explosion Limits:** No data available

**Explosive Properties:** No data available

**Oxidizing Properties:** No data available

### 9.2: Other Information

**Other Information:** No other information available

## Section 10: STABILITY & REACTIVITY

### 10.1: Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2: Chemical Stability

Stable under normal conditions.

### Section 10: STABILITY & REACTIVITY (continued)

#### 10.3: Possibility of Hazardous Reactions

No dangerous reactions known under normal conditions of use.

#### 10.4: Conditions to Avoid

None under recommended storage and handling conditions (see section 7)

#### 10.5: Incompatible Materials

Fluorine, chlorine trifluoride

#### 10.6: Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### Section 11: TOXICOLOGICAL INFORMATION

#### 11.1: Information on Toxicological Effects

**Acute toxicity (oral):** Not classified

**Acute toxicity (dermal):** Not classified

**Acute toxicity (inhalation):** Not classified

#### GRAPHITE (7782-42-5)

**LD50 oral rat:** 2000 mg/kg

**Skin Corrosion/Irritation:** Non-irritant (Rabbit, OECD 404)

**Serious Eye Damage/Irritation:** Low-irritant (Rabbit, OECD 405)

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive Toxicity:** Not classified

**STOT-single Exposure:** Not classified

**STOT-repeated Exposure:** Not classified

**Aspiration Hazard:** Not classified

**Viscosity, Kinematic:** No data available

### Section 12: ECOLOGICAL INFORMATION

#### 12.1: Toxicity

**Ecology General:** The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

## Section 12: ECOLOGICAL INFORMATION (continued)

### 12.2: Persistence & Degradation

No additional information available

### 12.3: Bio-accumulative Potential

No additional information available

### 12.4: Mobility in Soil

No additional information available

### 12.5: Other Adverse Effects

No additional information available

## Section 13: DISPOSAL CONSIDERATIONS

### 13.1: Disposal Methods

**Waste treatment methods:** Dispose of contents/container in accordance with licensed collector's sorting instructions.

**Product/Packaging Disposal Recommendations:** Dispose of contents/container in accordance with licensed collector's sorting instructions.

## Section 14: TRANSPORTATION INFORMATION

**Department of Transportation (DOT):** In accordance with DOT | Not regulated

**Transportation of Dangerous Goods:** Not regulated

**Transport by Sea:** Not regulated

**Air Transport:** Not regulated

## Section 15: REGULATORY INFORMATION

### 15.1: US Federal Regulations

**Graphite (7782-42-5):** Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2: International Regulations

**CANADA | Graphite (7782-42-5):** Listed on the Canadian DSL (Domestic Substances List)

**EU REGULATIONS | Graphite (7782-42-5):** Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

**NATIONAL REGULATIONS | Graphite (7782-42-5):** Listed on the

AICS (Australian Inventory of Chemical Substances)

IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

KECL/KECI (Korean Existing Chemicals Inventory)

**Section 15: REGULATORY INFORMATION (continued)****15.2: International Regulations (continued)**

**NATIONAL REGULATIONS | Graphite (7782-42-5):** Listed on the  
NZIoC (New Zealand Inventory of Chemicals)  
PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
INSQ (Mexican National Inventory of Chemical Substances)  
TCSI (Taiwan Chemical Substance Inventory)

**15.3: US State Regulations**

No additional information available

**Section 16: OTHER INFORMATION**

According to FederalRegister / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Revision Date:** 06/03/2020

**Data Sources:** ECHA. Loli.

**Training Advice:** Normal use of this product shall imply use in accordance with the instructions on the packaging.

**SDS US (GHS HazCom 2012)**

**This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.**