Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015 Date of issue: 2017-12-15 Revision date: 2017-12-15 Version: 1.0

SECTION 1: Identification 1.1. Product identifier Product form Product name Product code	: Substance			
Product form Product name	: Substance			
Product name	. Substance			
	: HIPC			
FIDUUCICOUE	: Not available			
Substance name				
	: Graphite			
1.2. Relevant identified uses of th		•		
Use of the substance/mixture : High Purity Carbon CRM, for laboratory use only				
<b>1.3.</b> Details of the supplier of the	safety data sheet			
National Research Council Canada 1200 Montreal Road Ottawa, K1A 0R6 - Canada T 613-993-2359	*	National Research Council Canada	Conseil na recherches	
1.4. Emergency telephone number	er			
Emergency number	: CANUTEC 1-613-996-6	6666		
SECTION 2: Hazards identification				
2.1. Classification of the substan	ce or mixture			
GHS classification				
Not classified.				
2.2. Label elements				
GHS labelling				
No labelling applicable				
2.3. Other hazards				
No additional information available				
2.4. Unknown acute toxicity (GHS	S)			
Not applicable				
SECTION 3: Composition/informatio	n on ingredients			
3.1. Substances				
Name		Product identifier		% (by weight)
Graphite		(CAS-No.) 7782-42	2-5	100
•			. 0	100
3.2. Mixtures Not applicable				
4.1. Description of first aid measu				
First-aid measures after inhalation	: If breathing is difficult, re position comfortable for unwell.			
First-aid measures after skin contact	: If irritation occurs, flush irritation persists.	skin with plenty of wate	er. Get medic	al attention if
First-aid measures after eye contact : In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.				



First-a	aid measures after ingestion	<ul> <li>If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.</li> </ul>
4.2.	Most important symptoms a	nd effects, both acute and delayed
	toms/effects after inhalation	: May cause respiratory tract irritation.
	toms/effects after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symp	toms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symp	toms/effects after ingestion	: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.
4.3.	Indication of any immediate	medical attention and special treatment needed
		. In case of accident or if you feel unwell, seek medical advice immediately (show the
SECT	ION 5: Firefighting measures	
5.1.	Extinguishing media	
	ble extinguishing media table extinguishing media	:Powder, water spray, foam, carbon dioxide. :None known.
5.2.	Special hazards arising fron	the substance or mixture
Fire h	azard	: Products of combustion may include, and are not limited to: oxides of carbon.
5.3.	Advice for firefighters	
	ction during firefighting	: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).
SECT	ION 6: Accidental release mea	sures
6.1.	Personal precautions, prote	ctive equipment and emergency procedures
Gene	ral measures	: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
6.2.	Methods and material for co	ntainment and cleaning up
For co	ontainment	: Contain spill, then place in a suitable container. Minimize dust generation. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Metho	ods for cleaning up	: Scoop up material and place in a disposal container. Provide ventilation.
6.3.	Reference to other sections	

SECTION 7: Handling and storage		
7.1. Precautions for safe handlin	g	
Precautions for safe handling	: Avoid contact with skin and eyes. Avoid generating and breathing dust. Do not swallow. Do not eat, drink or smoke when using this product. Good housekeeping is important to prevent accumulation of dust. The use of compressed air for cleaning clothing, equipment, etc, is not recommended.	
Hygiene measures	: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.	
7.2. Conditions for safe storage,	including any incompatibilities	
Storage conditions	: Keep out of reach of children. Keep container tightly closed, dry and in a well-ventilated place.	

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SECTION 8: Exposure controls/personal protection			
8.1. Control parameters			
Graphite (7782-42-5)			
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (all forms except graphite fibers- respirable particulate matter)	
ACGIH	Remark (ACGIH)	Pneumoconiosis	
OSHA	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)	
OSHA	OSHA PEL (TWA) (ppm)	15 mppcf	
OSHA	Remark (OSHA)	Table Z-3. CAS No. source: eCFR Table Z- 1.	
IDLH	US IDLH (mg/m <sup>3</sup> )	1250 mg/m <sup>3</sup>	
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	2.5 mg/m <sup>3</sup> (natural-respirable dust)	

8.2. Exposure controls	
Appropriate engineering controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand protection	: Wear suitable gloves.
Eye protection	: Safety glasses or goggles are recommended when using product.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	: Maintain levels below Community environmental protection thresholds.
Other information	Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

<b>SECTION 9: Physical and chemic</b>	cal pro	perties
9.1. Information on basic physical and chemical properties		
Physical state	:	Solid
Appearance	:	Rods
Colour	:	Grey
Odour	:	Odourless
Odour threshold	:	No data available
рН	:	No data available
Melting point	:	3652 - 3697 °C (6606 - 6687 °F)
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)	:	Not flammable
Explosive limits	:	No data available
Explosive properties	:	No data available

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:	No data available
:	No data available
:	No data available
:	No data available
:	Slightly soluble
:	No data available

#### 9.2. Other information

No additional information available

#### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2. Chemical stability

Stable under normal storage conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 10.4. Conditions to avoid

Heat. Incompatible materials.

#### 10.5. Incompatible materials

Strong oxidizing agents.

#### **10.6.** Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

#### SECTION 11: Toxicological information

### **11.1.** Information on toxicological effects

Acute toxicity	: Not classified.
HIPC	
LD50 oral rat	No data available
LD50 dermal rabbit	No data available
LC50 inhalation rat	No data available
Skin corrosion/irritation	: Based on available data, the classification criteria are not met.
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.
Carcinogenicity	: Based on available data, the classification criteria are not met.
Reproductive toxicity	: Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.



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Specific target organ toxicity (repeated exposure)	: Based on available data, the classification criteria are not met.
Aspiration hazard	: Based on available data, the classification criteria are not met.
Symptoms/effects after inhalation	: May cause respiratory tract irritation.
Symptoms/effects after skin contact	: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion	<ul> <li>May be harmful if swallowed. May cause stomach distress, nausea or vomiting.</li> </ul>

SECTION 12: Ecological information			
12.1. Toxicity			
Ecology - general	: No additional information available.		
12.2. Persistence and degradability	12.2. Persistence and degradability		
HIPC			
Persistence and degradability	Not established.		
12.3. Bioaccumulative potential			
HIPC			
Bioaccumulative potential	Not established.		

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Product/Packaging disposal recommendations	: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.	

#### **SECTION 14: Transport information**

In accordance with DOT/TDG

Not regulated for transport

Additional information	
Other information	: No supplementary information available.
Special transport precautions	: Do not handle until all safety precautions have been read and understood.

### SECTION 15: Regulatory information

### **15.1. Federal regulations**

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

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#### 15.2. US State regulations

#### No additional information available

SECTION 16: Other information	
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Prepared by	: Nexreg Compliance Inc.

#### **DISCLAIMER:**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

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