



SAFETY DATA SHEET

1. Identification

Product identifier	Graphite Electrode – All Grades
Recommended use	For Industrial Use Only Electric furnace steel production
Recommended restrictions	None Known

Manufacturer/Supplier information

Company name:	Fedmet Resources Corporation
Address:	1000 N. West St. Suite 1200 #889 Wilmington, DE 19801
Product Support/Technical Services Phone:	(514) 931-5711
Website	www.fedmet.com

Emergency telephone number: Corporate Office: (514)931-5711
Technical Services: (514)931-5711
Contact E-Mail: ladledr@fedmet.com

2. Hazard(s) identification

Classified hazards

This item is defined as an article per OSHA (29 CFR 1910.1200) and is therefore exempt from labeling. A Safety Data Sheet is available. This item is not hazardous per OSHA 29 CFR 1910.1200(c). However, individual customer processes (such as grinding, sawing, or blasting) may result in the formation of dust that may present health hazards. May cause respiratory irritation, lung injury, or cancer by inhalation. Limit skin contact. Wash hands after handling. Dispose of waste and residues in accordance with local authority requirements. Wear protective gloves/protective clothing/eye protection

Physical hazards	None Classified
Health hazards	None Classified
Environmental hazards	None Classified

Label elements

Hazard Symbol	None
Signal Word	None
Hazard Statement	This substance does not meet the criteria for classification
Precautionary Statements	
Prevention	Observe good industrial hygiene practices
Response	Wash hands after handling.
Storage	Store away from incompatible materials
Disposal	Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC)

None Known.
Supplemental Information
None

3. Composition/information on ingredients

Chemical Name	Common Name/Synonyms	CAS Number	%
Carbon Graphite		7782-42-5	>99

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact Rinse with water. Get medical attention if irritation develops and persists.
Ingestion Rinse mouth with water. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Direct contact with eyes may cause temporary irritation. Coughing.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

If concerned: Get medical advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water Fog. Foam. Dry Chemical Power. Carbon Dioxide (CO₂)
Unsuitable extinguishing media Do not use water jet as an extinguisher, it could spread fire.
Specific hazards arising from the chemical During Fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up
The product is immiscible with water and will sediment in water systems. Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

U.S. ACGIH Threshold Limit Values

<i>Components</i>	<i>Type</i>	<i>Value</i>	<i>Form</i>
Carbon Graphite (CAS 7782-42-5)	TWA	2 mg/m ³	Respirable fraction.

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

<i>Components</i>	<i>Type</i>	<i>Value</i>	<i>Form</i>
Carbon Graphite (CAS 7782-42-5)	TWA	2mg/m ³	Respirable.

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

<i>Components</i>	<i>Type</i>	<i>Value</i>	<i>Form</i>
Carbon Graphite (CAS 7782-42-5)	TWA	2mg/m ³	Respirable.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

<i>Components</i>	<i>Type</i>	<i>Value</i>	<i>Form</i>
Carbon Graphite (CAS 7782-42-5)	TWA	2mg/m ³	Respirable fraction.

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

<i>Components</i>	<i>Type</i>	<i>Value</i>	<i>Form</i>
Carbon Graphite (CAS 7782-42-5)	TWA	2mg/m ³	Respirable fraction.

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

<i>Components</i>	<i>Type</i>	<i>Value</i>	<i>Form</i>
Carbon Graphite (CAS 7782-42-5)	TWA	2mg/m ³	Respirable dust..

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment	
Eye/face protection	If contact is likely, safety glasses with side shields are recommended.
Skin protection	
Hand protection	Wear appropriate protective gloves.
Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.

General Hygiene Considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Solid.
Color	Black
Odor	Odorless.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	<2760°C / Not applicable.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Bulk density sand products	Not available.
Solubility(ies)	
Solubility (water)	Insoluble in water
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions

Possibility of hazardous reactions
Conditions to avoid
Incompatible materials
Hazardous decomposition products

No dangerous reaction known under conditions of normal use.
Contact with incompatible materials
Chlorine.
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation
Skin contact
Eye contact
Ingestion

No long term effect on respiratory system expected
No adverse effects due to skin contact are expected
Direct contact with eyes may cause temporary irritation
Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics:

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

<i>Components</i>	<i>Species</i>	<i>Test Results</i>
Carbon Graphite (CAS 7782-42-5) Oral: LD50	Rat	>10000 mg/kg

Skin corrosion/irritation
Serious eye damage/eye irritation
Respiratory or skin sensitization
 Respiratory sensitization
 Skin sensitization
Germ cell mutagenicity

Prolonged skin contact may cause temporary irritation.
Direct contact with eyes may cause temporary irritation.

Not a respiratory sensitizer.
This product is not expected to cause skin sensitization.
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

12. Ecological information

Ecotoxicity
Persistence and degradability
Bio accumulative potential
Mobility in soil
Other adverse effects

The product is not classified as environmentally hazardous.
No data is available on the degradability of this product.
No data available.
The product is insoluble in water.
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local Disposal Regulations	Dispose in accordance with all applicable regulations
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Bulk Transport

Not Applicable.

15. Regulatory information

Canadian regulations

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

16. Other information, including date of preparation or last revision

This information is supplied to be informative and to alert the user of the material. The ultimate compliance with federal, state, and/or local regulations concerning the use of this material, or compliance with respects to products liability, rest solely upon the purchaser thereof.

Reasons for Revision: Converted MSDS to SDS.
Prepared by: Fedmet Resources Corporation
Date: February 2018

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End of Safety Data Sheet