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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common Name/Synonyms</th>
<th>CAS Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Graphite</td>
<td></td>
<td>7782-42-5</td>
<td>&gt;99</td>
</tr>
</tbody>
</table>

*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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Graphite (CAS 7782-42-5)</td>
<td>TWA</td>
<td>15 mppcf</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

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.

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: No dangerous reaction known under conditions of normal use.
Conditions to avoid: Contact with incompatible materials
Incompatible materials: Chlorine.
Hazardous decomposition products: No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure:
Inhalation: No long term effect on respiratory system expected
Skin contact: No adverse effects due to skin contact are expected
Eye contact: Direct contact with eyes may cause temporary irritation
Ingestion: 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:

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Graphite</td>
<td>Rat</td>
<td>&gt;10000 mg/kg</td>
</tr>
<tr>
<td>(CAS 7782-42-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral: LD50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Skin corrosion/irritation: Prolonged skin contact may cause temporary irritation.
- Serious eye damage/eye irritation: Direct contact with eyes may cause temporary irritation.
- Respiratory or skin sensitization:
Respiratory sensitization
Not a respiratory sensitizer.

Skin sensitization
This product is not expected to cause skin sensitization.

Germ cell mutagenicity
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
The product is not classified as environmentally hazardous.

Persistence and degradability
No data is available on the degradability of this product.

Bio accumulative potential
No data available.

Mobility in soil
The product is insoluble in water.

Other adverse effects
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

US federal regulations
This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All chemical substances in this product are listed on the TSCA chemical substance inventory where required.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous Chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not Regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations
US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. Massachusetts RTK - Substance List
Carbon Graphite (CAS 7782-42-5)

US. New Jersey Worker and Community Right-to-Know Act
Carbon Graphite (CAS 7782-42-5))

US. Pennsylvania Worker and Community Right-to-Know Law
Carbon Graphite (CAS 7782-42-5)
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

**DISCLAIMER:** Reasonable care has been taken in the preparation of the information provided, and believed to be correct as of the issue date. However, Fedmet Resources Corporation makes no representation or warranties, and assumes no responsibility as to the completeness and accuracy thereof. Users must make their own determination as to the suitability of the product for their purpose prior to use. Fedmet Resources Corporation will not be responsible for any damages of any nature directly or indirectly whatsoever resulting from the use of, reliance upon, or the misuse of the information contained herein.

End of Safety Data Sheet