

## Safety Data Sheet

### Section 1: Identification

Product Identity	Company Details
<b>Product Name:</b> METCAR Lead-Free Bronze Impregnated <b>Product Description:</b> Carbon Graphite Impregnated with Lead-Free Bronze	Metallized Carbon Corporation 19 South Water Street Ossining , NY 10562
<b>Relevant Uses</b> Mechanical applications of carbon products	Phone: (914) 941-3738
	<b>Emergency Telephone Number</b> (914) 941-3738

### Section 2: Hazards Identification

Warning: Respiratory and Skin Irritant

Warning: May form Combustible Dust



Typically this product is sold in a pre-machined form to customer specification where there is little to no risk of particle inhalation by the end consumer. In the cases where blank stock is provided to the consumer, machining can release airborne particles that may be inhaled or cause mechanical irritation to the eyes and skin. Acute exposure is typically not a concern but repeated over exposure may lead to respiratory ailments such as Pneumoconiosis. These airborne particles also have the potential to combust if they exist in sufficient quantity.

### Section 3: Composition/Information on Ingredients

Component	C.A.S . #	Relative Concentration by Weight
Natural Graphite	7782-42-5	0-90%
Synthetic Graphite	7782-42-5	0-90%
Carbon Coke	7440-44-0	0-90%
Tin	7440-31-5	1-20%
Copper	7440-50-8	10-40%

\*Exact concentration percentage is withheld as a trade secret

### Section 4: First Aid Measures

General:	Treat symptomatically; typical hygienic practices are generally adequate.
Contact:	If dust from the product enters the eyes or irritates the skin flush with water.
Inhaled:	If inhaled seek fresh air and rest. Seek medical attention if irritation persists.
Ingested:	If ingested seek medical attention.

**Section 5: Fire-Fighting Measures**

**Extinguishing Media**

Water, Sand, CO2 Etc.

**Special Fire Fighting Procedures**

Be aware of potential explosion hazard due to dust accumulation. Use self-contained breathing apparatus as normal.

**Section 6: Accidental Release Measures**

**Steps to Be Taken in Case Material Is Released or Spilled**

Normal housekeeping practice; sweep, shovel or vacuum clean up. Avoid creating and breathing dust.

**Section 7: Handling and Storage**

**Precautions to Be Taken in Handling and Storing**

Graphite is electrically conductive. Dust accumulations may cause electrical short circuits or other malfunctions.

Avoid storing near oxidizing agents and halogenated acids or in extreme heat to maintain stability.

**Other Precautions**

Provide adequate dust collection and/or ventilation during machining.

**Section 8: Exposure Controls/Personal Protection**

Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIH TVL	Other Limits Recommended
Natural Graphite (C.A.S. #7782-42-5)	15mg/m <sup>3</sup>	2mg/m <sup>3</sup>	N/A
Synthetic Graphite (C.A.S. #7782-42-5)	15mg/m <sup>3</sup>	2mg/m <sup>3</sup>	N/A
Carbon (C.A.S. #7440-44-0)	15mg/m <sup>3</sup>	10mg/m <sup>3</sup>	N/A
Tin(C.A.S.#7440-31-5)	2mg/m <sup>3</sup>	2mg/m <sup>3</sup>	N/A
Copper(C.A.S.#7440-50-8)	1mg/m <sup>3</sup>	1mg/m <sup>3</sup>	N/A

**Necessary Respiratory Protection:** NIOSH/OSHA approved respirator if TLV or PEL is exceeded.

Ventilation	Local Exhaust	Special	N/A
	Dust collection when machining		
	Mechanical (General) N/A	Other	N/A

Protective Gloves	Eye Protection
Yes adequate to prevent skin contact	Yes if airborne particles are produced.

**Other Protective Clothing or Equipment** Normal work clothing

**Work/Hygienic Practices** Avoid food and drinks. Wash hands before eating.



**Section 9: Physical and Chemical Properties (Bronze)**

Boiling Point 4873°F	Decomposition Temp N/A	Specific Gravity (H20 = 1) 2.5	Partition Coefficient N/A
Vapor Pressure (mm Hg) 0	pH N/A	Melting Point 1832°F	Decomposition Temperature N/A
Vapor Density (AIR = 1) Normally Solid N/A	Viscosity N/A	Evaporation Rate (Butyl Acetate = 1) Normally Solid	Auto-ignition temperature N/A

Solubility in Water Insoluble

**Appearance and Odor**

Gray-Black Solid / No Odor

Flash Point Does not flash	Flammable Limits N/A	LEL N/A	UEL N/A
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**Unusual Fire and Explosion Hazards**

Carbon dust is not normally explosive but it may weakly contribute if the event is initiated by another explosive dust or gas.

**Section 10: Stability and Reactivity**

Stability	Unstable		Conditions to Avoid Extreme Heat
	Stable X		

**Incompatibility (Materials to Avoid)**

Strong oxidizers, oxidizing acids and halogenated acids.

**Hazardous Decomposition or Byproducts**

Combustion produces CO and CO2

Hazardous Polymerization	May Occur		Conditions to Avoid N/A
	Will Not Occur X		

**Section 11: Toxicological Information**

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Route(s) of Entry:	Inhalation?	Yes as dust	Skin?	No	Ingestion?	Unlikely
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**Health Hazards (Acute and Chronic)**

Prolonged and repeated over exposure to dust may lead to Pneumoconiosis.

Dust particles may cause mechanical irritation to eyes and skin.

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Carcinogenicity:	NTP?	NO	IARC Monographs?	NO	OSHA Regulated?	NO
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**Signs and Symptoms of Exposure**

As typical for nuisance dust, acute effects are not expected.

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**Medical Conditions**

**Generally Aggravated by Exposure**

Individuals with pre-existing chronic respiratory impairment or with Serum antitrypsin deficiency may be at risk of Pneumoconiosis if exposure is prolonged.

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**Section 12: Ecological Impact**

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There is no data to suggest that this material would pose a threat to the environment. The constituent materials are relatively inert and not expected to have any meaningful impact on the environment.

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**Section 13: Disposal Considerations**

**Waste Disposal Method**

Subject to local State and Federal Regulations for solid waste disposal. This product should be disposed of in a chemical waste landfill. Recovery should be considered as an option.

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**Section 14: Transport Information**

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This product is not regulated by the US DOT, IATA or IMO.

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**Section 15: Regulatory Information**

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All components of this product are listed on the EPA TSCA inventory

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**Section 16: Other Information**

Acronyms:

C.A.S. # – Chemical Abstracts Service Registry Number  
OSHA PEL – Occupational Safety and Health Administration Particle Exposure Limit  
ACGIH TLV – American Conference of Governmental Industrial Hygienists Threshold Limit Values  
LEL/UEL – Lower/Upper Explosive Limit  
NTP – National Toxicology Program  
IARC – International Agency for Research on Cancer  
LC50 – Lethal Concentration to kill 50% of the population  
LD50 – Lethal Dose at which 50% of the population is killed  
US DOT – United States Department of Transportation  
IATA – International Air Transport Association  
IMO – International Maritime Organization  
EPA TSCA: Environmental Protection Agency Toxic Substance Control Act

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Disclaimer: The information presented in this SDS is provided based on the data available at this time. No warranty is implied through the materials provided and we assume no responsibility for its use. It is the user's responsibility to assure the proper use of this product.

Prepared on: May 25, 2016

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