



## **Section 1: Company and Product Identification**

### ***Section 1.1: Product Identifiers***

Product Name: Natural Graphite Powder (99%+)  
Product Number: -10099  
Producer: Urbix Resources, LLC  
CAS-No. 7782-42-5

### ***Section 1.2: Identified Uses***

Identified Uses: Filler, thermal additive, drilling fluids, plastic additive, re-carburizer, casting powders, rubber additive, tint/pigment, lubricant, EMF absorber, general inert filler-additive.

\*Not recommended as food or cosmetic additive.

### ***Section 1.3: Supplier Information***

Manufacturer/Company:

Urbix Resources, LLC  
245 W. 2<sup>nd</sup> Street  
Mesa, AZ 85201

Phone: (480)205-9907

Preparer: Adam Small

Email: [Asmall@grupourbix.com](mailto:Asmall@grupourbix.com)

\*Emergency Phone:

(520) 975-3304

## **Section 2: Hazardous Identification**

### ***Section 2.1: Classification of Substance***

Graphite is NOT a hazardous substance or mixture.

## **Section 2.2: Label Elements**

Graphite is NOT a hazardous substance or mixture

## **Section 2.3: Other Hazards**

Natural Graphite may contain elements other than carbon. This substance may contain crystalline silica and a variety of quartz. These quartz and silica impurities are naturally occurring and are intercalated within the graphite. This silica in most cases, is not inhalable unless the natural graphite is very finely milled and separated. There is sufficient evidence that inhaled crystalline silica causes cancer in humans. IARC classification: Group 1.

## **Section 3: Composition and Ingredient Information**

### **Substance Composition**

Substance Composition: Natural Graphite 99% (balance is inert mineral ash)  
CAS #: 7784-42-5  
EC#: 231-955-3  
Formula: C  
Molecular Weight: 12.01 g/mol

## **Section 4: First Aid Measures**

Eye Contact	Immediately flush eyes with water for at least 20 minutes. Get medical attention if symptoms persist.
Inhalation	Move exposed person to a particulate-free location. If symptoms persist seek medical attention immediately. Wear approved dust mask to avoid breathing dust.
Skin Contact	Wash with soap and water. Get medical attention if symptoms persist.
Ingestion	Wash out mouth with water. Get medical attention if symptoms persist. Don't induce vomiting unless directed by a medical professional.

## **Section 5: Fire Fighting Measures**

Extinguishing Media	Use water, Alcohol-resistant foam, or carbon dioxide
Unsuitable Extinguishing Media	Do not use water jet as an extinguisher, as this will spread the fire
Special Hazards	At temperatures above 1500 °C, graphite reacts with substances containing oxygen, including water and carbon dioxide. In very high-temperature fire events, use sand to cover and isolate the graphite
Protective Equipment	Self contained air pack, gloves, safety goggles
NFP Rating	110
Products of Combustion	Carbon dioxide, CO <sub>2</sub> , Carbon Monoxide, CO

## **Section 6: Accidental Release Measures**

Personal Precautions	Avoid dust formation. Avoid breathing vapors, mist, or gas. For personal protection see section 8
Methods for Cleaning Up	Conventional sweep or vacuum. Avoid creating dusting conditions
Environmental Precautions	Natural Graphite is inert and insoluble and will not pose any soluble ion hazards to the environment. However, best practices should be followed and spilled material should be cleaned up and disposed of in an appropriate manner

## **Section 7: Handling and Storage**

Safe Handling Precautions	Provide adequate ventilation. Dust deposits should not be allowed to accumulate on surfaces as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Natural graphite is a good conductor of electricity. Avoid contact between natural graphite and electrical circuitry
Slip Hazard	Natural Graphite is very lubricious and presents a slip hazard if spilled on pedestrian surfaces

Storage and Incompatibilities	Store all Graphite and carbonaceous materials in a dry location. Natural Graphite is incompatible with all oxidizing agents
Dust Explosibility Hazards	Natural Graphite is a high-surface area material. Dust formation poses a very slight risk of explosion hazard. Dust class ST1, MIE greater than 10 J (very low hazard of spark conflagration)

## **Section 8: Exposure Control/Personal Protection**

### ***Section 8.1: Control Parameters***

<b>Component</b>	<b>CAS #</b>	<b>%</b>	<b>ACGIH TWA</b>	<b>Control Reference</b>
Natural Graphite	7782-42-5	100	2.0mg/m <sup>3</sup> Respirable dust	2016 ACGIH TLV Handbook
Silica, Quartz	14808-60-7	3-6%	.025mg/m <sup>3</sup> Respirable dust	2016 ACGIH TLV Handbook

### ***Section 8.2: Exposure Controls***

Engineering Measures	Use appropriate dust collection to maintain safe dust levels below the recommended control values
Respiratory Protection	Approved dust mask, type N95 recommended
Skin Protection	Conventional work gloves and clothing
Eye Protection	Conventional safety glasses or goggles
Additional Controls	Spilled graphite on pedestrian surfaces may pose a significant slip hazard

## **Section 9: Physical and Chemical Properties**

Color	Gray to Black
Odor	None
Boiling Point	N/A
Specific Gravity	2.2-2.3

Vapor Pressure (mm Hg)	N/A
Solubility in Water	Insoluble
pH	N/A
Decomposition Temp	Oxidizes above 400 °C
Material State	Solid, granular or powder
Melting Point	Sublimates at 3652 °C
Vapor Density	N/A
% Volatile by weight	0-4%
Evaporation Rate	N/A
Auto Ignition	Above 500 °C
Dust Explosion Class	ST1 = KST > 0-200 bar m/s
Flash Point	N/A Solid substance with very high melting point

### **Section 10: Stability and Reactivity**

Stability	Stable. Will not polymerize
Conditions to Avoid	Avoid contact with oxidizing agents
Materials to Avoid	Oxidizing agents
Hazardous Decomposition Products	Carbon Dioxide, Carbon Monoxide
Flammable Limits (% by volume)	LEL and UEL values not available. MIE greater than 10 J. When exposed to very high-energy ignition sources very finely divided graphite powder can form explosive mixtures with air. Avoid contact between graphite dust clouds and high-energy ignition sources. Classified as not flammable

### **Section 11: Toxicological Information**

Graphite is inert, insoluble and is not expected to present an ingestion hazard. Toxicological information about natural graphite is not available.

## **Section 12: Ecological Information**

Persistence and Degradability	Natural graphite will not degrade further under normal conditions. This form of carbon is stable, unreactive in water under ambient conditions, and is insoluble
Assessment	To the best of our knowledge, natural graphite should not present any environmental hazards
Bioaccumulation	There is no evidence indicating that natural graphite is bioaccumulative
Mobility in Soil	Not determined, however natural graphite is not expected to have mobility in soil as it is an insoluble, inorganic substance
Aquatic Toxicity	No data available

## **Section 13: Disposal Considerations**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions, and any by-product should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

## **Section 14: Transport Information**

<b>ICAO/IATA</b>	
Shipping Name	Natural Graphite
Hazard Class	Non Hazardous
Subsidiary Class	N/A
UN Number	N/A
Packing Group	N/A

Marine Transport	Not classified as a hazardous material
Land Transport	Not classified as a hazardous material
Air Transport	Not classified as a hazardous material
Transport Label Required	No label required
Additional Transport Info	Technical Name: Natural Graphite

### **Section 15: Regulatory Information**

EEC EINECS	#231-955-3
US TSCA	Yes
Canada DSL	Yes
Canada NDSL	No
Australian AICS	Yes
Korean ECL	Yes
Asia PAC	Yes
Swiss Giftliste 1	Yes #G8422
IECSC	Yes
PICCS	Yes
New Zealand NZLoC	Yes
REACH	Natural Graphite is exempt from REACH
RoHS	Natural Graphite is compliant with EU RoHS directive
WEEE	Natural Graphite is compliant with the EU waste electrical and electronic equipment directive
SARA 302	No chemicals in this material are subject to SARA title III, Section 302
SARA 313	No chemicals in this material exceed the threshold reporting levels established by SARA title III, Section 313
SARA 311/312 Hazards	No SARA hazards

## **Section 16: Additional Information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Urbix Resources is a limited liability corporation and it shall not be held liable for any damage resulting from the handling or from the contact with the above product.

### **Abbreviations Used:**

ACGIH TWA: American Council of Government and Industrial Hygienists Time Weighted Average value

CAS: Chemical Abstracts Services

N/A: Not Applicable

The logo for URBIX features a large, stylized sun with a bright yellow center and multiple pointed rays extending outwards. The word "URBIX" is written in a light green, sans-serif font across the middle of the sun's rays.

URBIX



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