

## Section 1: Identification of Product and Supplier

<b>Product Name:</b>	Synthetic Graphite
<b>Trade Name:</b>	Mersen Grade DS4
<b>Recommended Use:</b>	High-temperature all-purpose material noted for its machinability, thermal and electrical conductivity, chemical stability, lubrication properties, and light weight.
<b>Supplier Information:</b>	Mersen USA GS Corp. - St Marys 215 Stackpole Street St. Marys, PA 15857 814.781.1234
<b>Emergency Phone:</b>	800.424.9300 (CHEMTREC)

## Section 2: Hazards Identification

<b>GHS Classification:</b>	This product is not classified as hazardous.
<b>OSHA Hazard Category:</b>	Combustible Dust - May form combustible dust concentrations in air. (This material poses no hazard in its shipped form. Further processing may produce dust that can form combustible concentrations in air.)
<b>Signal Word:</b>	Warning (OSHA)
<b>Symbols:</b>	None
<b>Risk Phrases:</b>	None
<b>Other hazards:</b>	Dust generated from this product may be slightly irritating to the eyes and lungs. Repeated and prolonged exposure to graphite dust may lead to pneumoconiosis.

## Section 3: Composition

<b>Chemical Identity:</b>	100% Graphite
<b>Synonyms:</b>	Synthetic Graphite
<b>Unique Identifiers:</b>	CAS: 7782-42-5, EINECS: 231-955-3
<b>Impurities:</b>	None

## Section 4: First Aid Measures

<b>General Information:</b>	Do not give victim anything to drink if unconscious. Get medical assistance if troubles continue. Physician should treat symptomatically.
<b>If Inhaled:</b>	If large quantity is inhaled, get out of polluted area and breathe fresh air. Place unconscious person on side in the recovery position to ensure breathing.
<b>Contact with Skin:</b>	Wash with soap and water. Rinse well.
<b>Contact with Eyes:</b>	Rinse with large quantity of water. Remove contact lenses before rinsing. Seek medical attention if irritation persists.
<b>Ingestion:</b>	Rinse mouth and drink water. Seek medical attention if trouble ensues.

## Section 5: Fire-fighting Measures

<b>Extinguishing Media:</b>	Foam, carbon dioxide, dry powder, sand
<b>Extinguishing Media Not to Be Used:</b>	Water

**Firefighting Precautions:** Self-contained breathing apparatus and protective clothing should be worn.

**Specific Hazards:** Heat decomposition causes formation of irritating gases and vapors. Dust may form explosive mixture with air.

**Section 6: Accidental Release Measures**

**Personal Precautions:** Use filtered breathing mask (respirator) appropriate for graphite dust and safety goggles.

**Environmental Precautions:** Not particularly dangerous to environment, but precautions should be made to prevent dust from entering drains and soil.

**Clean Up:** Use industrial vacuum and wear personal protective equipment.

**Section 7: Handling and Storage**

**Safe Handling:** Store and handle in a manner that avoids excessive dusting. When exposed to extremely high energy ignition sources, fine graphite dust can form explosive mixtures with air.

**Safe Storage:** Avoid storing near/with oxidizing agents.

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

**Exposure Limits:** OSHA PEL for Graphite Dust: 15 mg/m<sup>3</sup> Total Dust  
5 mg/m<sup>3</sup> Respirable Fraction

**Engineering Controls:** Ventilate and control dust at source.

**Personal Protection Measures:** Wear filtered mask (respirator) and safety glasses/goggles. Remove from contaminated clothing. Keep away from food and drink. Wash hands after handling and before eating.

## Section 9: Physical and Chemical Properties

<b>Appearance:</b>	Solid	<b>Explosive Limits:</b>	Explosive mixtures in air can appear in the case of dust formation.
<b>Color:</b>	Grey to Black	<b>Vapor Pressure:</b>	Not applicable
<b>Odor:</b>	None	<b>Vapor Density:</b>	Not applicable
<b>pH:</b>	Not applicable	<b>Relative Density:</b>	1.6 - 2.0
<b>Melting Point:</b>	Not applicable	<b>Solubility:</b>	Insoluble in water and classical solvents
<b>Boiling Point:</b>	Not applicable	<b>Partition coefficient:</b>	Not applicable
<b>Flash Point:</b>	> 600° C (dispersed dust)	<b>Auto-ignition Temp:</b>	Not applicable
<b>Evaporation Rate:</b>	Not applicable	<b>Decomposition Temp:</b>	Not applicable
<b>Flammability:</b>	Not applicable	<b>Viscosity:</b>	Not applicable

## Section 10: Stability and Reactivity

<b>Reactivity and Stability:</b>	Stable under normal temperature conditions. Stable up to 2500 C in the absence of oxygen.
<b>Hazardous Reactions:</b>	Hazardous polymerization will not occur.
<b>Incompatible Materials:</b>	Oxidizing agents should be avoided.
<b>Hazardous Decomposition Products:</b>	CO, CO <sub>2</sub>

## Section 11: Toxicological Information

<b>Exposure by Inhalation:</b>	LC50: 64400 mg/m <sup>3</sup> (rat)
<b>Exposure by Ingestion:</b>	LD50: > 10000 mg/m <sup>3</sup> (rat)

<b>Exposure to skin/eyes:</b>	Slightly irritating to eyes. Skin contact poses no problems.
<b>Chronic Toxicity:</b>	Repeated and prolonged exposure to graphite dust may lead to pneumoconiosis.
<b>Carcinogenicity:</b>	Not listed by IARC, NTP or OSHA

<b>Section 12: Ecological Information</b>	
<b>Ecotoxicity:</b>	No effects expected.
<b>Persistence/Degradability:</b>	Not degradable
<b>Potential to Bio-accumulate:</b>	Graphite is not soluble, and will not bio-accumulate.
<b>Mobility in Soil:</b>	Highly unlikely to cause widespread contamination.

<b>Section 13: Disposal Considerations</b>	
<b>Product Disposal:</b>	When recycling is not an option, dispose of waste in accordance with local regulations.

<b>Section 14: Transportation Information</b>	
<b>Transportation:</b>	This product is not defined as hazardous by DOT or IATA for road, railway, sea or air transport.

<b>Section 15: Regulatory Information</b>	
<b>GHS Labeling:</b>	Does not require hazard warning label or symbols
<b>OSHA Labeling:</b>	Warning. Combustible Dust - May form combustible dust concentrations in air.
<b>Hazardous Substance</b>	None
<b>Risk Phrases</b>	None

**Safety Phrases**                      None

**US Federal Regulations:**        This material **DOES NOT** contain any chemicals required to be identified under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), or TSCA 12(b).

## Section 16: Other Information

**Regulation:**                            This SDS is in accordance with the Globally Harmonized Classification of Labeling and Chemicals (GHS)

**Issued by:**                             EHS Department – Mersen St. Marys

**Notes:**                                    This SDS is based on knowledge of the product as of the date of revision. The information is not exhaustive, and does not exempt the user from ensuring other legal obligations are met in regards to the holding and handling of this product.