

**Section 1: Identification of Product and Supplier** 

**Product Name:** Synthetic Graphite

**Trade Name:** Mersen Grade E+50

**Recommended Use:** High-temperature all-purpose material noted for its

machinability, thermal and electrical conductivity, chemical

stability, lubrication properties, and light weight.

**Supplier Information:** Mersen USA GS Corp. - St Marys

> 215 Stackpole Street St. Marys, PA 15857

814.781.1234

**Emergency Phone:** 800.424.9300 (CHEMTREC)

**Section 2: Hazards Identification** 

**GHS Classification:** This product is not classified as hazardous.

**OSHA Hazard Category:** 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.)

**Signal Word:** Warning (OSHA)

**Symbols:** None

**Risk Phrases:** None

Other hazards: 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.

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**Section 3: Composition** 

**Chemical Identity:** 100% Graphite

**Synonyms:** Synthetic Graphite

**Unique Identifiers:** CAS: 7782-42-5, EINECS: 231-955-3

Impurities: None

**Section 4: First Aid Measures** 

**General Information:** Do not give victim anything to drink if unconscious. Get medical

assistance if troubles continue. Physician should treat

symptomatically.

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.

**Contact with Skin:** Wash with soap and water. Rinse well.

**Contact with Eyes:** Rinse with large quantity of water. Remove contact lenses

before rinsing. Seek medical attention if irritation persists.

**Ingestion:** Rinse mouth and drink water. Seek medical attention if trouble

ensues.

**Section 5: Fire-fighting Measures** 

**Extinguishing Media:** Foam, carbon dioxide, dry powder, sand

**Extinguishing Media Not** 

to Be Used:

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** Not particularly dangerous to environment, but precautions

**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/m³ Total Dust

5 mg/m<sup>3</sup> Respirable Fraction

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

**Personal Protection** Wear filtered mask (respirator) and safety glasses/goggles.

**Measures:** Remove from contaminated clothing. Keep away from food and

drink. Wash hands after handling and before eating.

**Section 9: Physical and Chemical Properties** 

**Appearance:** Solid **Explosive Limits:** Explosive mixtures in air can

appear in the case of dust

formation.

**Color:** Grey to Black **Vapor Pressure:** Not applicable



Odor: None Vapor Density: Not applicable

pH: Not applicable Relative Density: 1.6 - 2.0

Melting Point: Not applicable Solubility: Insoluble in water and

classical solvents

**Boiling Point:** Not applicable **Partition coefficient:** Not applicable

Flash Point: > 600° C Auto-ignition Temp: Not applicable

(dispersed dust)

Evaporation

Rate:

Not applicable

Decomposition Temp:

Not applicable

Flammability: Not applicable Viscosity: Not applicable

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

**Reactivity and Stability:** Stable under normal temperature conditions. Stable up to 2500

C in the absence of oxygen.

**Hazardous Reactions:** Hazardous polymerization will not occur.

**Incompatible Materials:** Oxidizing agents should be avoided.

Hazardous Decomposition CO, CO<sub>2</sub>

**Products:** 

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

**Exposure by Inhalation:** LC50: 64400 mg/m³ (rat)

**Exposure by Ingestion:** LD50:  $> 10000 \text{ mg/m}^3 \text{ (rat)}$ 

**Exposure to skin/eyes:** Slightly irritating to eyes. Skin contact poses no problems.

**Chronic Toxicity:** Repeated and prolonged exposure to graphite dust may lead to

pneumoconiosis.

Carcinogenicity: Not listed by IARC, NTP or OSHA

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**Section 12: Ecological Information** 

**Ecotoxicity:** No effects expected.

Persistence/Degradability: Not degradable

Potential to Bio-

accumulate:

Graphite is not soluble, and will not bio-accumulate.

**Mobility in Soil:** Highly unlikely to cause widespread contamination.

**Section 13: Disposal Considerations** 

**Product Disposal:** When recycling is not an option, dispose of waste in accordance

with local regulations.

**Section 14: Transportation Information** 

**Transportation:** This product is not defined as hazardous by DOT or IATA for

road, railway, sea or air transport.

**Section 15: Regulatory Information** 

**GHS Labeling:** Does not require hazard warning label or symbols

OSHA Labeling: Warning. Combustible Dust - May form combustible dust

concentrations in air.

Hazardous Substance None

Risk Phrases 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

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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.