

Material Safety Data Sheet



Poco Graphite Synthetic Graphite Semiconductor Grade ZEE, SFG,
DFP, TRA, HPD, CZR, SCF, PLS, FM

Section 1. Chemical product and company identification

- Common name** : Poco Graphite Synthetic Graphite Semiconductor Grade ZEE, SFG, DFP, TRA, HPD, CZR, SCF, PLS, FM
- Material uses** : Electrical Discharge Machining (EDM) sinker electrodes, hot glass handling, semiconductor tooling fixtures, and many others.
- Supplier/Manufacturer** : POCO Graphite Inc., 300 Old Greenwood Road, Decatur, TX 76234
- In case of emergency** : (800) 433-5547, ext. 4202 during normal business hours
(800) 433-5547, ext. 4219 after normal business hours

Section 2. Hazards identification

- Physical state** : Solid.
- Emergency overview** : No specific hazard.
USE WITH CARE.
Follow good industrial hygiene practice.
- Routes of entry** : Dermal contact. Eye contact. Inhalation. Ingestion.
- Potential acute health effects**
- Eyes** : No known significant effects or critical hazards.
- Skin** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Potential chronic health effects** : Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.
Mutagenic effects: Not available.
Teratogenic effects: Not available.

See toxicological information (section 11)

Section 3. Composition, Information on Ingredients

	CAS number	% by weight
United States Graphite, synthetic	7440-44-0	>99

This material is classified as not hazardous under OSHA regulations.

See Chapters 8, 11 and 14 for details.

Section 4. First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.
- Skin contact** : Wash with soap and water. Get medical attention if symptoms occur.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Notes to physician** : No specific antidote. Medical staff must contact Poison Control Center.



Section 5. Fire fighting measures

- Flammability of the product** : Non-flammable.
- Fire hazards in the presence of various substances** : Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Slightly flammable in the presence of the following materials or conditions: heat.
Use an extinguishing agent suitable for the surrounding fire.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Special remarks on fire hazards** : Airborne dust. Weak explosion hazard.

Section 6. Accidental release measures

- Personal precautions** : Minimize exposure to dust.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. See section 13 for waste disposal information.
- Methods for cleaning up** : If emergency personnel are unavailable, vacuum or carefully scoop up spilled material and place in an appropriate container for disposal by incineration. Avoid creating dusty conditions and prevent wind dispersal.

Section 7. Handling and storage

- Handling** : Wash thoroughly after handling. Maintain blocks as shipped, no specific handling or storage identified. Dust or powder from machining process should be kept in closed container.
- Storage** : Maintain graphite blocks in stable position. Any machined generated dust should be maintained in closed container.

Section 8. Exposure controls, personal protection

- Engineering controls** : Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal protection

- Eyes** : Recommended: Safety glasses.



- Respiratory** : A respirator is not needed under normal and intended conditions of product use. If dust exceeds recommended exposure limits, select proper respirator based on particle size of dust generated.

- Hands** : Wear suitable gloves.
>8 hour/hours (breakthrough time): Natural rubber (latex).



- Skin/Body** : Body: Recommended: Lab coat.



- Personal protection in case of a large spill** : Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear MSHA/NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear.



Product name

United States

Graphite, synthetic

Exposure limits

ACGIH (United States).

TWA: 10 mg/m³ 8 hour/hours. Form: Nuisance particulates.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Physical state	: Solid.
Color	: Gray to black.
Odor	: Odorless.
Molecular formula	:
Specific gravity	: 1.4 to 2 (Water = 1)
Solubility	: Insoluble in cold water, hot water.

Section 10. Stability and reactivity

Stability and reactivity	: The product is stable.
Incompatibility with various substances	: Reactive with oxidizing materials.
Hazardous polymerization	: Will not occur.

Section 11. Toxicological information

Acute Effects

Eyes	: No known significant effects or critical hazards.
Skin	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Potential chronic health effects	: Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH. Mutagenic effects: Not available. Teratogenic effects: Not available.

Section 12. Ecological information

Products of degradation	: These products are carbon oxides.
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Section 13. Disposal considerations

Waste disposal	: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
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Consult your local or regional authorities.

Section 14. Transport information

Classification

DOT/IMDG/IATA: Not regulated.

Label

Not applicable.



Additional information

Not applicable.

Section 15. Regulatory information

United States

- HCS Classification** : Not regulated.
- U.S. Federal regulations** : TSCA : All components listed.
 SARA 302/304/311/312 extremely hazardous substances: Not listed.
 SARA 302/304 emergency planning and notification: Not listed.
 SARA 302/304/311/312 hazardous chemicals: Not listed.
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Not listed.
 Clean Water Act (CWA) 307: Not listed.
 Clean Water Act (CWA) 311: Not listed.
 Clean Air Act (CAA) 112 accidental release prevention: Not listed.
 Clean Air Act (CAA) 112 regulated flammable substances: Not listed.
 Clean Air Act (CAA) 112 regulated toxic substances: Not listed.

State regulations : California prop. 65: No products were found.

International regulations

International lists : All components listed are listed on major international inventories or exempted from being listed in Australia (AICS), Europe (EINECS/ELINCS), Korea (TCCL), Japan (METI/MOL), Philippines (RA6969).

Section 16. Other information

Hazardous Material Information System (U.S.A.) :	Health	0
	Fire hazard	0
	Reactivity	0
	Personal protection	C

National Fire Protection Association (U.S.A.) :



References : ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG.

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.