OCHNOLOGY SOLUTION PVT. LTD
Website: www.ochnology.com
Tel: +91 9286823642/43
Address: B-153, Sector-4 Defence Colony, Dehradun, Uttarakhand, India – 248001
E-Mail: projects@ochnology.com, bd@ochnology.com

Material Safety Data Sheet (MSDS)

Graphitized Petroleum Coke (GPC)

Material: Graphitized Petroleum Coke (Carbon / Graphite) | Graphite CAS No. 7782-42-5

1. Identification of the Substance and Supplier

Product Name	Graphitized Petroleum Coke (GPC)
Material Type	Graphitized carbon (recarburiser / carbon raiser)
CAS No.	7782-42-5 (graphite); 64743-05-1 (petroleum coke)
Synonyms	GPC, graphitized petroleum coke, recarburiser, carbon raiser, artificial graphite
Product Use	Recarburiser in ductile iron, steel (EAF/IF), and grey iron production
Supplier	Ochnology Solution Pvt. Ltd., B-153, Sector-4 Defence Colony, Dehradun, Uttarakhand, India – 248001
Contact	projects@ochnology.com | bd@ochnology.com

2. Hazards Identification

GHS Classification: Graphitized petroleum coke (carbon) is not classified as hazardous under GHS. Dust may cause mechanical irritation and can form combustible dust. Signal word: WARNING (combustible dust).

- GPC (graphitized carbon) is not classified as a hazardous substance under GHS
- Fine carbon dust is combustible and may form an explosive dust cloud
- Dust may cause mechanical irritation to eyes, skin, and respiratory tract
- Prolonged inhalation of dust may cause respiratory discomfort
- Keep away from ignition sources and strong oxidisers

3. Composition / Information on Ingredients

Component	CAS No.	Concentration
Graphitized Carbon (C)	7782-42-5	>98%
Ash / mineral residue	Various	<1%
Sulphur (S)	7704-34-9	0.03 – 0.10% (grade dependent)

OCHNOLOGY SOLUTION PVT. LTD
Website: www.ochnology.com
Tel: +91 9286823642/43
Address: B-153, Sector-4 Defence Colony, Dehradun, Uttarakhand, India – 248001
E-Mail: projects@ochnology.com, bd@ochnology.com

4. First-Aid Measures

Inhalation: Move to fresh air. Seek medical attention if respiratory irritation persists.

Skin Contact: Wash with soap and water. Generally non-irritating; remove dust.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water. Carbon is inert; seek medical attention if discomfort occurs.

5. Fire-Fighting Measures

- Massive material is difficult to ignite; fine dust is combustible
- Use dry chemical, CO_2, foam, or water spray on the surrounding fire
- Avoid creating dust clouds, which can present an explosion risk
- Wear full protective equipment and SCBA when fighting dust fires

6. Accidental Release Measures

- Avoid generating airborne dust during clean-up
- Collect mechanically (sweep or vacuum) into suitable containers
- Keep away from ignition sources; avoid dust clouds
- Wear appropriate PPE (dust mask, goggles, gloves) during clean-up

7. Handling and Storage

- Avoid dust generation; provide adequate ventilation and dust control
- Keep away from ignition sources, open flame, and strong oxidisers
- Store in a dry, covered area protected from moisture
- Use appropriate PPE; ground equipment where combustible dust may accumulate

8. Exposure Controls / Personal Protection

- Graphite / carbon (respirable dust): 2 mg/m^3 (8-hr TWA) – typical reference value
- Provide local exhaust ventilation where dust is generated
- Respiratory protection (N95/P2) where dust limits may be exceeded
- Eye protection: safety goggles; hand protection: gloves; wear suitable work clothing

9. Physical and Chemical Properties

OCHNOLOGY SOLUTION PVT. LTD
Website: www.ochnology.com
Tel: +91 9286823642/43
Address: B-153, Sector-4 Defence Colony, Dehradun, Uttarakhand, India – 248001
E-Mail: projects@ochnology.com, bd@ochnology.com

Property	Value
Appearance	Black / dark grey granular solid or powder
Odour	Odourless
pH	Not applicable (insoluble)
Melting / Sublimation	Very high (graphite sublimes ~3,600°C)
Solubility in Water	Insoluble
Bulk Density	Approx. 0.72 – 0.85 g/cc (grade dependent)

10. Stability and Reactivity

- Stable under normal conditions of storage and use
- Combustible at high temperature; oxidises (burns) in air at elevated temperature
- Incompatible with strong oxidisers (e.g. chlorates, peroxides, nitrates)
- No hazardous polymerization occurs

11. Toxicological Information

- Low acute toxicity; graphitized carbon is inert and of low toxicity
- Dust may cause mechanical irritation to eyes and respiratory tract
- Prolonged dust exposure may cause respiratory discomfort
- Not classified as carcinogenic, mutagenic, or toxic to reproduction

12. Ecological Information

- Not classified as hazardous to the aquatic environment
- Inert carbon; no significant bioaccumulation
- No significant ecological effects expected under normal use
- Avoid release of large quantities of dust into the environment

13. Disposal Considerations

- Recover and reuse where possible
- Dispose of in accordance with local, state, and national regulations
- Inert material; may be disposed of as non-hazardous solid waste where permitted

14. Transport Information

OCHNOLOGY SOLUTION PVT. LTD
Website: www.ochnology.com
Tel: +91 9286823642/43
Address: B-153, Sector-4 Defence Colony, Dehradun, Uttarakhand, India – 248001
E-Mail: projects@ochnology.com, bd@ochnology.com

UN Number	Not regulated
Proper Shipping Name	Not classified as dangerous goods
Hazard Class	Not applicable
Packing Group	Not applicable
Remarks	Not regulated for transport; protect from ignition sources and moisture

15. Regulatory Information

- GPC (graphitized carbon) not classified as hazardous under GHS
- Combustible carbon dust subject to applicable dust-explosion and exposure regulations
- Graphite listed on major chemical inventories (CAS 7782-42-5)

16. Other Information

This MSDS has been prepared in accordance with the GHS 16-section format and covers premium, standard, and economy grades of graphitized petroleum coke. GPC is essentially inert carbon; the principal handling concern is combustible carbon dust. Information relates to the specific material designated.