# Safety Data Sheet GRAPHITE POWDER

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## SECTION 1: Identification

### GHS Product identifier

| | |
|---|---|
| Product name | GRAPHITE POWDER |

### Other means of identification

| Product | Product Code |
|---|---|
| GRAPHITE POWDER LR<br>Black lead, Plumbago | GL002 |

### Recommended use of the chemical and restrictions on use

Pencils, crucibles, retorts, foundry facings, molds, lubricants, paints and coatings, boiler compounds, powder glazing, electrotyping, monochromator in x-ray diffraction analysis, electrodes, bricks, chemical equipment, motor and generator brushes, seal rings, rocket nozzles, cathodes in electrolytic cells, fibers, self-lubricating bearings, intercalation compounds and laboratory reagent.

### Supplier's details

| | |
|---|---|
| Name | ChemSupply Australia Pty Ltd |
| Address | 38-50 Bedford Street<br>5013 Gillman South Australia<br>Australia |
| Telephone | 08 8440 2000 |
| email | www.chemsupply.com.au |

### Emergency phone number

CHEMCALL 1800 127 406 (Australia) / +64-4-917-9888 (International)

## SECTION 2: Hazard identification

### General hazard statement

Not classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

Classified as non-Hazardous according to the Globally Harmonised System of classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

### Classification of the substance or mixture

### GHS classification in accordance with: UN GHS revision 7

Not a hazardous substance or mixture.

**GHS label elements, including precautionary statements**

Not a hazardous substance or mixture.

**Other hazards which do not result in classification**

Not a hazardous substance or mixture.

## SECTION 3: Composition/information on ingredients

**Mixtures**

Molecular weight: 12.01

**Components**

| Component | CAS no. | Concentration |
|---|---|---|
| **GRAPHITE powder (EC no.: 231-955-3)** | **7782-42-5** | **<= 100 % (weight)** |
| CLASSIFICATIONS: No data available. HAZARDS: No data available. | | |

## SECTION 4: First-aid measures

**Description of necessary first-aid measures**

| | |
|---|---|
| General advice | First Aid Facilities: Maintain eyewash fountain in work area. |
| If inhaled | If inhaled, remove from contaminated area to fresh air immediately. Apply artificial respiration if not breathing. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear. |
| In case of skin contact | Wash off with soap and plenty of water. Get medical attention if symptoms occur. |
| In case of eye contact | Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. If rapid recovery does not occur, obtain medical attention |
| If swallowed | Rinse mouth thoroughly with water immediately, repeat until all traces of product have been removed. DO NOT INDUCE VOMITING. Seek medical advice if effects persist. |

**Most important symptoms/effects, acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**Indication of immediate medical attention and special treatment needed, if necessary**
For advice, contact the National Poisons Information Centre (Phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.

## SECTION 5: Fire-fighting measures

**Suitable extinguishing media**
Small fire: Use dry chemical, CO2, water spray or foam.
Large fire: Use water spray, fog or foam.
If safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.

**Specific hazards arising from the chemical**
Hazards from Combustion Products: May liberate toxic fumes in fire include oxides of carbon.
May burn but do not ignite readily. Containers may explode when heated. Runoff may pollute waterways. Fire may produce irritating, poisonous and/or corrosive gases.

**Special protective actions for fire-fighters**
Wear SCBA and structural firefighter's uniform.

## SECTION 6: Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Avoid inhalation, contact with skin, eyes and clothing. Avoid substance contact. Avoid generation of dusts: do not inhale dusts. Ensure supply of fresh air in enclosed rooms.
Wear protective clothing specified for normal operations (see Section 8)

**Methods and materials for containment and cleaning up**
Eliminate all ignition sources (no smoking, flares, sparks or flame) within at least 15m. Do NOT touch or walk through this product. Stop leak if safe to do so. Prevent entry into waterways, drains, confined areas. Prevent dust cloud. Use clean non-sparking tools to collect material and place it into loosely-covered plastic containers for later disposal.

## SECTION 7: Handling and storage

**Precautions for safe handling**
Avoid generation or accumulation of dusts. Avoid prolonged or repeated contact with skin and eyes . Wash hands and face thoroughly after working with material. Use with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

**Conditions for safe storage, including any incompatibilities**
Store away from oxidizing agents. Keep containers closed at all times. Store in a cool,dry place. Protect from direct sunlight and moisture.

## SECTION 8: Exposure controls/personal protection

**Appropriate engineering controls**
Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

**Individual protection measures, such as personal protective equipment (PPE)**

**Eye/face protection**
The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

**Skin protection**
Clean impervious clothing should be worn. Clothing for protection against
chemicals should comply with AS 3765 Clothing for Protection Against Hazardous
Chemicals.

Hand Protection: Ensure hand protection complies with AS 2161, Occupational protective gloves - Selection, use and maintenance.

**Body protection**
Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

**Respiratory protection**

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

## SECTION 9: Physical and chemical properties

### Basic physical and chemical properties

| | |
|---|---|
| Physical state | Solid |
| Appearance | Steel-gray to black powder with a metallic sheen. |
| Color | No data available. |
| Odor | Odourless. |
| Odor threshold | No data available. |
| Melting point/freezing point | 2820 °C |
| Boiling point or initial boiling point and boiling range | No data available. |
| Flammability | May be combustable at high temperature. |
| Lower and upper explosion limit/flammability limit | No data available. |
| Flash point | No data available. |
| Explosive properties | No data available. |
| Auto-ignition temperature | No data available. |
| Decomposition temperature | No data available. |
| Oxidizing properties | No data available. |
| pH | 5 - 6 (50 g/l, H2O, 20 °C)(slurry) |
| Kinematic viscosity | No data available. |
| Solubility | Solubility in Water: Insoluble. |
| Partition coefficient n-octanol/water (log value) | No data available. |
| Vapor pressure | No data available. |
| Evaporation rate | No data available. |
| Density and/or relative density | Specific Gravity: 2.2 |
| Relative vapor density | No data available. |
| Particle characteristics | No data available. |

### Supplemental information regarding physical hazard classes

No data available.

### Further safety characteristics (supplemental)

Other Information: High electrical and thermal conductivity. Sublimes at 3650 °C.
Specific heat 0.17 at room temperature, 0.48 at 1500 °C.
Tensile strength 400 to 2000 psi; compressive strength ~2000-8000 psi.
Resistant to oxidation and thermal shock.
The crystalline allotropic form of carbon.
Relatively soft, greasy feel.

## SECTION 10: Stability and reactivity

### Reactivity

Stable under normal conditions of storage and handling.

### Chemical stability

Stable under recommended storage conditions.

**Possibility of hazardous reactions**
Reacts at 300 °C with potassium, sodium, rubidium and cesium to give intercalation compounds. These compounds ignite in air and may react explosively with water. Dust explosion hazard.

Hazardous Polymerization: Will not occur.

**Conditions to avoid**
Exposure to moisture.

Avoid storing in direct sunlight and avoid extremes of temperature.

**Incompatible materials**
Strong oxidisers, halogens, chlorine trifluoride, fluorine and potasssium superoxide.

**Hazardous decomposition products**
May liberate toxic fumes in fire include oxides of carbon.

## SECTION 11: Toxicological information

**Information on toxicological effects**

**Acute toxicity**
Ingestion: No adverse effects expected, however, large amounts may cause nausea and vomiting.

Inhalation: Inhalation may be harmful. Material may cause irritation to mucous membranes and upper respiratory tract.

**Skin corrosion/irritation**
May be harmful by absorption. May cause irritation.

**Serious eye damage/irritation**
May cause irritation to the eyes.

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**
No data available

**Reproductive toxicity**
No data available

**Specific target organ toxicity (STOT) - single exposure**
No data available

**Specific target organ toxicity (STOT) - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional information**
Chronic Effects: Overexposure to dusts may result in pneumoconiosis, a lung disease due to permanent deposition of substantial amounts of particulate matter in the lungs.

## SECTION 12: Ecological information

## SECTION 13: Disposal considerations

**Disposal methods**

**Product disposal**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers.

**Other disposal recommendations**
Do not discharge this material into waterways, drains and sewers.

## SECTION 14: Transport information

**ADG (Road and Rail)**
Not dangerous goods

**IMDG**
Not dangerous goods

**IATA**
Not dangerous goods

## SECTION 15: Regulatory information

**Safety, health and environmental regulations specific for the product in question**

**Australia SUSMP**
Poison Schedule: NS

## SECTION 16: Other information

**Further information/disclaimer**
ChemSupply Australia Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon ChemSupply Australia Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of ChemSupply Australia Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

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Standard for the Uniform Scheduling of Medicines and Poisons, Commonwealth of Australia
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'
Safe Work Australia, 'National Code of Practice fot the Preparation of Safety Data Sheets for Hazardous Chemicals', July 2020.
Safe Work Australia, 'National Guide for Classifying Hazardous Chemicals', July 2020.
Safe Work Australia, Workplace Exposure Standards for Airbourne Contaminants, December 2019
Safe Work Australia, Hazardous Chemical Information System (HCIS), hcis.safeworkaustralia.gov.au
IATA, Dangerous Goods Regulations (DGR)
IMO, International Maritime Dangerous Goods Code (IMDG)