

MATERIAL SAFETY DATA SHEET

Not Classified as Hazardous according to criteria of Workplace Australia

Date of issue February 2005

1. IDENTIFICATION

1.1 Product name:	Graphite Pigment
1.2 Correct Shipping Name:	Graphite Powder
1.3 UN No.:	None allocated
1.4 Dangerous Goods Class:	None allocated
1.5 Subsidiary Risk:	None allocated
1.6 Hazchem Code:	None allocated
1.7 Pack Group:	Not applicable
1.8 Poisons Schedule:	Not applicable
1.9 Uses:	Colourant for paints

2. Physical Description/ Properties

2.1 Appearance:	Black dry powder.
2.2 Odour	Odourless
2.3 Boiling Point:	Not applicable
2.4 Melting Point:	>3500 deg. celcius
2.5 Vapour pressure:	Not applicable
2.6 Specific Gravity:	2 - 2.25
2.7 Flash Point:	Not applicable
2.8 Solubility in water:	Insoluble
2.9 Flammability limits	N/A

4.0 Ingredients

Chemical entity	CAS No.	Proportions
Graphite	(7782-42-5)	100%

5. HEALTH HAZARD INFORMATION

5.1 Health effects-Acute

Swallowed

Ingestion can cause gastric disturbances. Oral LD50=not available

Eye

Eye contact will cause stinging, blurring, tearing and irritation.

Skin

Skin contact will cause redness, itchiness and irritation.

Inhaled

Inhalation of dust may cause irritation to the mucous membrane and upper airways.

Health effects-Chronic

Chronic Graphite dust can cause a particular form of pneumoconiosis called GRAPHITOSIS, which can be either simple or progressive even after removal from exposure and is disabling. Graphite pneumoconiosis resembles coal workers' pneumoconiosis. Respirable particles of graphite are retained in the lungs and bronchi.

After many years of exposure, shortness of breath, cough, black sputum, and radiological findings of pulmonary fibrosis with areas of necrosis and cavitation develop. Headaches, depression, and decreased appetite have also been noted with chronic exposure.

Other Information Graphite acts synergistically with SILICA to cause pneumoconiosis, and most of the recorded cases of graphite pneumoconiosis have involved mixed exposures to these two substances. The pneumoconiosis caused by graphite is distinct from that of silica, however, in that there does not seem to be an increased risk for tuberculosis in graphitosis. Graphite pneumoconiosis has occurred mainly in graphite miners and electroplaters. Graphite pneumoconiosis is due primarily to the natural form, but there have been rare reports of pulmonary injury from exposure to synthetic graphite. In an unusual case, graphite deposits were found in the synovial fluid around the knee in a worker exposed to graphite, indicating that systemic uptake and distribution may occur.

First Aid

Swallowed

Do NOT induce vomiting. Contact a Poisons Information Centre (Phone 131 126) or a doctor for advice.

Eye

Flush eyes with copious amounts of clean water for at least 15 minutes, retract eyelids often.

If irritation occurs seek medical attention.

Skin

Wash affected areas thoroughly with clean water.
If irritation occurs seek medical attention immediately.

Inhaled

Remove victim to fresh air. If difficulty in breathing or irritation occurs see medical attention immediately.

Advice to doctor

Treat symptomatically based on judgement of doctor and individual reactions of the patient.

6.0 PRECAUTIONS FOR USE

6.1 Exposure standards

10 mg/m³

3.2 Engineering controls

Provide general exhaust ventilation to keep exposure levels to a minimum.

3.3 Personal protection

Antidust mask, goggles and gloves are recommended when handling this product. Avoid inhalation and provide adequate ventilation.

3.4 Flammability

Bulk material is non-combustible. Dusts are combustible.

7.0 SAFE HANDLING INFORMATION

7.1 Storage/Transport

A moderately dry, well ventilated area is considered adequate for handling and storage. Avoid direct heat source.

This product is non-toxic and does not require special notices for transport handling. Keep containers tightly sealed.

7.2 Spills and Disposals

Spills

Remove all sources of heat and ignition. Increase ventilation. Wear sufficient respiratory protection and full protective clothing to minimise skin and eye exposure. Sweep up material avoiding generation of dusts. Alternatively product may be dampened with water to avoid airborne dust then collected with a clean, non-sparking shovel. Seal all wastes in vapour tight labelled plastic containers for eventual disposal. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.

Disposal

Dispose in accordance with all Local, State and Federal regulations by incineration at an approved waste disposal site.

4.4 FIRE AND EXPLOSION HAZARD

Fire/Explos. Hazard

Bulk material is non-combustible. Dusts are combustible. If graphite contacts liquid potassium, rubidium, or caesium at 300°C, intercalation compounds may be formed. These compounds may explode on contact with water or ignite in air.

Hazardous Decomposition or Byproducts

Toxic fumes of carbon monoxide and carbon dioxide.

Fire Fighting Precautions

Wear Self-Contained Breathing Apparatus (S.C.B.A) and full protective clothing to minimise skin exposure.

Extinguishing Media

Water fog.

5.1 Contact points

Organisation	Location	Telephone	Ask for
Langridge Artist Colours	Yarraville, Victoria	(03) 9689 0577	Mr. D. Coles