

MATERIAL SAFETY DATA SHEET VEIN GRAPHITE



Ceylon Graphene
Technologies

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Details

Name	Vein Graphite
Product Code	CGT-G-45K
REACH NO.	A registration number is not available for this substance as the substance or its uses are exempted from registration or the annual tonnage does not require a registration.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses:

Additive material for energy, coating, electronics, composites, etc. For professional use only. For R&D and industrial use only.

1.3 Supplier Details

Supplied By:	Ceylon Graphene Technologies Pvt Ltd, 100/1, Sri Jayawardenepura Mawatha, Rajagiriya, Sri Lanka
Telephone:	+ 94 0713 666 888 + 94 0770 411 985
Email:	info@ceylongraphene.com

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. Substance properties have been derived from graphite (bulk substance); the properties of the single/few-layer nanomaterial is under evaluation and to some extent not known.

2.2 Label elements

No label required.

2.3 Other hazards

Exposure may aggravate pre-existing, eye, skin, or respiratory conditions.

SECTION 3: Composition/Information on Ingredients

3.1 Substances

Name	Product Identifier	%	GHS-US Classification
Carbon	(CAS-No.) 7440-44-0	>99.0	Comb. Dust

Synonyms:	Vein Graphite
Formula:	C
Molecular Weight:	N/A

SECTION 4: First Aid Measures

4.1 Description of first aid measures

After Inhalation

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

After skin contact

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

After eye contact

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

After Ingestion

Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupsful of milk or water. Wash mouth out with water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Firefighting

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, dry chemical, carbon dioxide, or chemical foam

5.2 Special hazards arising from the substance of mixture

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

5.3 Advice for firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

General Measures: Use proper personal protective equipment as indicated in Section 8.

6.2 Spills/Leaks

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Minimize dust generation and accumulation. Avoid breathing dust, mist or vapor. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry place. Store in a tightly closed container.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Exposure limit sources

UK – EH40 Workplace Exposure Limits (WEL).

Component	CAS #	Control Parameters
Graphite - inhalable dust	7782-42-5	10 mg/m ³ (TWA)
Graphite - respirable dust	7782-42-5	4 mg/m ³ (TWA)

Inhalable dust is the fraction of material that is available for deposition in the respiratory tract; respirable dust is the fraction that penetrates into the gas exchange region of the lung.

Biological occupational exposure limits

This product does not contain any hazardous materials with biological limits.

8.2 Exposure controls

Personal protective equipment



Eyes: Wear safety glasses with side-shields conforming to appropriate government standards such as NOISH (US) or EN166 (EU).

Skin: Handle with appropriate gloves and use proper glove removal technique to avoid skin contact. Dispose of gloves in accordance with applicable laws. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Clothing: Wear complete suit protecting against chemicals; the type of equipment should be appropriate for the concentration and amount of dangerous substance used.

Respirators: Where protection from nuisance dusts is needed, use type N95 (US) or type P1 (EN 143) dust masks or those approved under appropriate government standards such as NIOSH (US) or CEN (EU).

General hygiene measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Soft Black/Grey Powder Platelets
Odour	Odourless
Odour threshold	No data available
pH	No data available
Melting/freezing point	No data available
Boiling point/range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability	No data available
Explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Bulk density	-0.681 g/cm ³
Solubility	No data available
Partition coefficient: <i>n</i>-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other safety information

No data available.

SECTION 10: Stability and Reactivity

10.1 Reactivity

Hazardous reactions will not occur under normal conditions.

10.2 Chemical stability

Stable under recommended handling and storage conditions (see section 7)

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Incompatible materials, excess heat

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available.

Skin corrosion/irritation

Prolonged exposure may cause skin irritation.

Serious eye damage/eye irritation

May cause eye irritation.

Respiratory or skin sensitization

No information found

Germ cell mutagenicity

Not classified

Carcinogenicity

Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65

Toxicity

The toxicological properties have not been fully investigated

Aspiration hazard

Not classified

Routes of exposure

Eye contact, ingestion, inhalation, skin contact.

Signs and Symptoms of Exposure

No data available.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological Information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bio accumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Avoid release to the environment.

SECTION 13: Disposal

13.1 Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: Transport

Non-hazardous for road, air and sea transport.

IATA: Not regulated as a hazardous material.

IMO: Not regulated as a hazardous material.

RID/ADR: Not regulated as a hazardous material.

SECTION 15: Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006, the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available.

15.2 Chemical safety assessment

No chemical safety report/assessment was carried out for this product.

SECTION 16: Other Information

Warranty

This material is for research and development use only. The information provided here is based upon the available information from material suppliers but not warranted as complete and is provided only as a guide. Ceylon Graphene Technologies Pvt Ltd shall not be held responsible for any damage resulting from use or handling of this product.