

MATERIAL SAFETY DATA SHEET

GRAPHITE NANOPOWDER

1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Graphite Nano powder
Company Identification: SISCO RESEARCH LABORATORIES PVT. LTD.
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2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#: 7782-42-5	Chemical Name: Graphite %: 100	EINECS#: 231-955-3
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3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Warning! Causes eye and respiratory tract irritation. Target Organs: Respiratory system, eyes.

Potential Health Effects

Eye: Causes eye irritation.

Skin: May cause skin irritation. May be harmful if absorbed through the skin.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed.

Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.

Chronic: No information found.

4 - FIRST AID MEASURES

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

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

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 cupfuls of milk or water. Wash mouth out with water.

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. Notes to

Physician: Treat symptomatically and supportively.

5 - FIRE FIGHTING MEASURES

General Information:

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.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.
Autoignition

Temperature: 700 deg C (1,292.00 deg F)

Flash Point: Not available

Explosion Limits:

Lower: Not available

Explosion Limits:

Upper: Not available

NFPA Rating: health: 2; flammability: 1; instability: 0;

6 - ACCIDENTAL RELEASE MEASURES

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

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.

7 – HANDLING AND STORAGE

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.

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

8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

Chemical Name | ACGIH | NIOSH | OSHA - Final PELs

Graphite | 2 mg/m³ | 2.5 mg/m³ TWA | none listed |

respirable |(respirable dust) fraction, all | 1250 mg/m³ IDLH | |

forms except | graphite fibers)

OSHA Vacated PELs: Graphite: 2.5 mg/m³ TWA (respirable dust)

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a
Not available

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste

regulations to ensure complete and accurate classification. RCRA P-Series: None listed.
RCRA U-Series: None listed.

Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Color: Not available

Odor: Not available

pH: Not available

Boiling Point: Not available

Freezing/Melting Point: Not available

Decomposition Temperature: Not available

Solubility in water: Insoluble

Molecular Formula: C

Molecular Weight: 12.01

10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, excess heat.

Incompatibilities with Other Materials Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide.

Hazardous Polymerization : Has not been reported.

11 - TOXICOLOGICAL INFORMATION

RTECS#: CAS# 7782-42-5: MD9659600

LD50/LC50: RTECS: Not available.

Carcinogenicity: Graphite - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found

Teratogenicity: No information found

Reproductive: No information found

Neurotoxicity: No information found

Mutagenicity: No information found

Other: The toxicological properties have not been fully investigated.

12 - ECOLOGICAL INFORMATION

N.A.

13 - DISPOSAL CONSIDERATIONS

N.A.

14 - TRANSPORT INFORMATION

	IATA	IMO	RID/ADR
Shipping Name:	Not regulated.	Not regulated.	Not regulated
Hazard Class:			
UN Number:			
Packing Group:			

15 - REGULATORY INFORMATION

US Federal TSCA

CAS# 7782-42-5 is listed on the TSCA Inventory.

Health & Safety Reporting

List None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules None of the chemicals in this product are under a Chemical Test Rule.

Section 12b None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use

Rule None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302

Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act: This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

Clean Water Act: None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA. OSHA:STATE Graphite can be found on the following state right to know lists: California, Pennsylvania, Minnesota, Massachusetts. California Prop 65

California No Significant

Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 36/37 Irritating to eyes and respiratory system.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection) CAS# 7782-42-5: 0

Canada

CAS# 7782-42-5 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations. CAS# 7782-42-5 is not listed on Canada's Ingredient Disclosure List.

16 - ADDITIONAL INFORMATION

SISCO RESEARCH LABORATORIES : provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.
