

SAFETY DATA SHEET

Section 1: Identification

Product Name: Graphene Nanoplatelets (GNP)

Chemical Name/Synonyms: Graphene

Company: Ecophene, LLC.



In emergency call 911.

Ecophene

For information about this SDS, phone#: (786) 879-6998

Section 2: Hazard(s) Identification

Hazard Classification: Irritant to skin, eyes, or respiratory tract.

Signal Word(s): Warning

Hazard Statements: Causes serious eye irritation and may cause respiratory irritation.

Pictograms:



Precautionary Statements: Avoid breathing dust, fume, mist, vapors, or spray. Use only outdoors or in a well-ventilated area. Wash hands and face thoroughly after handling. Wear eye protection.

Description of other hazards: None that we have examined.

Section 3: Composition/ Information on Ingredients

Chemical Name	Synonym	CAS#	Concentration
Graphene	None	1034343-98-0	99.9%

Section 4: First-Aid Measures

After skin contact: Wash with soap and water for no less than 15 minutes. If skin irritation occurs: seek medical advice/attention. Take off contaminated clothing and wash it before reuse. Rinse mouth with water.

After eye contact: Flush eyes with plenty of water.

After inhalation: Remove to fresh air. If breathing is difficult, give oxygen. Call a doctor/physician if you feel unwell.

After swallowing: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Call a POISON CENTER or doctor/physician if you feel unwell. Provide medical care provider with this SDS. Provide medical care provider with this SDS.

Section 5: Fire-Fighting Measures

Suitable extinguishing agents: Dry chemical, carbon dioxide, water spray or alcohol resistant foam.

Special protective equipment for firefighters: Do not enter fire area without proper protection including self-contained breathing apparatus (SCBA) and full protective equipment.

Section 6: Accidental Release Measures

Personal precautions: Clean up spills immediately using Protective Equipment recommended in Section 8 at a minimum.

Measures for cleaning/containing and environmental protection: The substance is insoluble in water and is not known to pose any significant environmental hazards. Keep it in suitable, closed containers for disposal. As a matter of good practice, minimize contamination of sewage water, soil, groundwater, drainage systems, or bodies of water.

Section 7: Handling and Storage

Handling: As with all chemicals, good industrial hygiene practices should be followed when handling this material. Conducting items should be bonded and grounded (<10 Ohms to ground). Avoid "Propagating Brush Discharges" by restricting use of insulating liners and coatings.

Storage: Keep container closed and sealed when not in use. Keep in a dry, cool, and well-ventilated location.

Section 8: Exposure Controls/Personal Protection

Chemical Name	OSHA PEL	OSHA PEL (ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
No data available				

General protective and hygienic measures: Use an exhaust ventilation system and/or process enclosure to minimize airborne dust. If handling results in dust generation, special ventilation may be needed to minimize dust exposure. If heated material generates vapor or fumes, use process enclosures, local exhaust ventilation, or other engineering controls to control exposure. Handle in accordance with general industrial hygiene practice.

Breathing equipment: To minimize risk of over exposure to dust, vapor or fumes it is

recommended that a local exhaust system is placed above the equipment, and that the working area is properly ventilated. When workers are reasonably likely to be exposed by inhalation, dust controls shall be implemented that demonstrate an exposure reduction of at least 90%. Use a National Institute for Occupational Safety and Health (NIOSH) certified respiratory with an Assigned Protection Factor (APF) of 50.

Protection of hands: Wear impervious gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Eye protection: Wear safety glasses or goggles.

Section 9: Physical and Chemical Properties

Form: Black powder

Odor: Odorless

Odor threshold: No data available

pH: No data available

Melting point/melting range: approx. 4500 °C

Boiling point/boiling range: No data available

Flash point: No data available

Evaporation rate: No data available

Flammability: No data available

Upper/lower flammability or explosive limits: N/A

Auto ignition temperature: No data available

Danger of explosion: Weak explosion risk

Vapor pressure: No data available

Vapor density: No data available

Relative density: 0.1495 g/cm³

Solubility in/Miscibility with water: Insoluble; Miscible in water

Section 10: Stability and Reactivity

Reactivity: No data available

Chemical stability: Stable under normal conditions

Conditions to avoid: No data available

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products: None

Section 11: Toxicological Information

Acute toxicity: To the best of our knowledge, the substance does not cause any immediate/acute effects/symptoms.

Section 12: Ecological Information (non-mandatory)

Ecotoxicity: This material is not expected to be harmful

Mobility: Not expected to migrate

Biodegradation: Not readily biodegradable

Bioaccumulation: No data available

Section 13: Disposal Considerations (non-mandatory)

Dispose of by incineration or landfill. It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste per regulations of the area in which the waste is generated and/or disposed of. Waste disposal must be in accordance with appropriate Federal, provincial, and local regulations. Any predictable or purposeful release to water, or any waste stream from manufacturing, processing, and use containing this substance is strictly prohibited.

Section 14: Transport Information (non-mandatory)

DOT regulations: Non-hazardous for transportation

Air transport ICAO-TI and IATA-DGR: Non-hazardous for transportation

Section 15: Regulatory Information (non-mandatory)

US Federal Regulations

SARA Section 313 (specific toxic chemical listings): Not listed

TSCA (Toxic Substances Control Act): This product is on the EPA Toxic Substances Control Act (TSCA) inventory.

Section 16: Other Information

SDS date of preparation/update: 2/27/2022

Revision Number: 1

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