

## MATERIAL SAFETY DATA SHEET (MSDS)

1. **Graphitic Carbon Nitride (g-C<sub>3</sub>N<sub>4</sub>) Powder**
2. **Identification of the substance/mixture and of the company/undertaking**

### 1.1. Product Details

Product name: Graphitic Carbon Nitride (g-C<sub>3</sub>N<sub>4</sub>) Powder  
 Product Number: NCZ-AM101-19  
 CAS#: 143334-20-7

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

Identified uses: Laboratory nanopowder for Research and Development (R&D) Use only

### 1.3. Supplier details

Manufacturer Name: NanoChemazone, Chemazone Inc.  
 5408 36 St NW, Edmonton, Alberta T6B 3P3, Canada  
 Telephone: +1-365-888-7013  
 Email address: [contact@nanochemazone.com](mailto:contact@nanochemazone.com)

## 2. Hazards identification

Toxicity : No Data Available  
 Eye Contact : Dust may cause irritation

Classification of the substance or mixture  
 Classification according to Regulation (EC) No 1272/2008  
 The substance is not classified as hazardous to health or the environment according to the CLP regulation.  
 Classification according to Directive 67/548/EEC or Directive 1999/45/EC N/A  
 Information concerning particular hazards for human and environment: No data available  
 Hazards not otherwise classified No data available Label elements  
 Labelling according to Regulation (EC) No 1272/2008: N/A  
 Hazard pictograms: N/A  
 Signal word: N/A  
 Hazard statements: N/A  
 WHMIS classification: Not controlled  
 Classification system  
 HMIS ratings (scale 0-4)  
 (Hazardous Materials Identification System)  
 Health (acute effects) = 0  
 Flammability = 0  
 Physical Hazard = 0  
 Other hazards  
 Results of PBT and vPvB assessment  
 PBT: N/A vPvB: N/A

## 3. Composition/Information on ingredients

### 3.1. Substances

Substances  
**CAS No. / Substance Name:** 143334-20-7 , Graphitic Carbon Nitride (g-C<sub>3</sub>N<sub>4</sub>) Powder

Chemical Characterization	:	Graphitic Carbon Nitride (g-C <sub>3</sub> N <sub>4</sub> ) Powder
Hazardous Ingredients	:	Nil

## 4. First-aid measures

### Description of first aid measures

**After inhalation:** Move the exposed individual to fresh air. Loosen clothing as necessary and position the individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing is difficult, give oxygen. Give artificial respiration if necessary.

**After skin contact:** Wash the affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation, discomfort, or vomiting persists. Flush with water for 15 minutes.

**After eye contact:** Rinse immediately with plenty of water, also under the eyelids, for at least 30 minutes. Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

**After swallowing:** Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

## 5. Fire Fighting Measures

### Extinguishing media

Extinguishing Data	:	Water Spray
Unsuitable Extinguishing Data	:	Carbon Dioxide, Dry Chemical Powder
Unusual Firefighting Hazards	:	Capable of creating a dust explosion
Special Firefighting Procedures	:	Use normal procedures which include Wearing self-contained breathing apparatus And protective clothing to prevent contact with skin and Eyes.

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment, and emergency procedures

Wear a respirator, chemical safety goggles, rubber boots, and gloves.

### 6.2. Environmental precautions

Sweep up, place in a bag, and hold for waste disposal.

### 6.3. Containment and cleaning:

Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

## 7. Handling and storage

### 7.1. Precautions for safe handling

Chemical Safety Goggles. Compatible with Chemical-resistant Gloves

### 7.2. Conditions for safe storage, including any incompatibilities

Store in a cool dry place.

### 7.3. Specific end uses

Use in laboratories.

## 8. Exposure controls / Personal protection

### 8.1. Control parameters

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Appropriate engineering controls

Chemical-resistant Gloves

#### Eye/face protection

Safety glasses and Avoid contact with eyes

#### Skin protection

Wash thoroughly after handling

#### Body Protection

Impervious clothing: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Self-contained breathing apparatus

#### Control of environmental exposure

Do not let product enter drains

## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Form:** Solid in various forms

**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  
**Relative density:** No data available  
**Water Solubility(ies):** insoluble  
**Partition coefficient:** No data available  
**Auto ignition temperature:** No data available  
**Decomposition temperature:** No data available  
**Viscosity:** No data available  
**Explosive properties:** No data available  
**Oxidising properties:** No data available

## 9.2. Other safety information

No data available.

## 10. Stability and reactivity

### 10.1 Reactivity

Non-Reactive/Non-Soluble.

### 10.2. Chemical stability

Completely Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reaction known

### 10.4. Conditions to avoid

No data available.

### 10.5. Incompatible materials

Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

## 11. Toxicological information

### 11.1. Information on toxicological effects

#### Skin corrosion/irritation

No data available

Inhalation: No data available

Dermal: No data available.

**Serious eye damage/eye irritation:** Irritation

**Respiratory or skin sensitization:** No Effect.

**Germ cell mutagenicity:** No data available.

**Carcinogenicity:** No data available

**Reproductive toxicity:** No data available.

**Specific target organ toxicity - single exposure:** No data available.

**Specific target organ toxicity - repeated exposure:** No Chocking Hazard.

**Aspiration hazard:** No data available.

**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.

## 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. Other adverse effects

No data available.

## 13. Disposal

### 13.1. Waste treatment methods

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator, equipped with an afterburner and scrubber.

Waste treatment methods

Recommendation

Consult official regulations to ensure proper disposal.

Uncleaned packaging: Recommendation:

Disposal must be made according to official regulations.

#### 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.

UN-Number

DOT, ADN, IMDG, IATA

N/A

UN proper shipping name

DOT, ADN, IMDG, IATA

N/A

Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class

N/A

Packing group DOT,IMDG, IATA

N/A

Environmental hazards:

N/A

Special precautions for user N/A

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code N/A

Transport/Additional information: DOT

Marine Pollutant (DOT): No

#### 15. Regulatory information

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

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings)

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California Proposition 65

Prop 65 - Chemicals are known to cause cancer

Substance is not listed.

Prop 65 - Developmental toxicity

Substance is not listed.

Prop 65 - Developmental toxicity, female

Substance is not listed.

Prop 65 - Developmental toxicity, male

Substance is not listed. Information about

limitation of use:

For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.

Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No

1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorization for use)

Substance is not listed.

REACH - Pre-registered substances

Substance is listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Protective Equipment: Gloves Lab coat, Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

#### 16. Other information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and applies to the product concerning appropriate safety precautions. It does not represent any guarantee of the properties of the product. Nanochemazone and its authorized distributors shall not be held liable for any damage resulting from handling or contact with the above product.

#### 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. Nanochemazone shall not be held responsible for any damage resulting from the use or handling of this product.