

# SAFETY DATA SHEET

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## 1. Products and Company Identification

<b>Identification of the product:</b>	Silica Nanospheres, 100 nm - 1000 nm, in Powder Form
<b>Chemical family:</b>	Metal composite
<b>Use of the substance/preparation:</b>	For laboratory research purposes
<b>Supplier:</b>	Alpha Nanotech Inc. 135-3800 Wesbrook Mall, Vancouver, BC V6S 2L9, Canada
<b>Information:</b>	<a href="http://www.alphananotechne.com">www.alphananotechne.com</a> <a href="mailto:info@alphananotechne.com">info@alphananotechne.com</a> +1 877 419 0711

## 2. Hazards Identification

### Emergency Overview

#### WHMIS Classification

Not rated

Not a hazardous substance or mixture

#### HMIS Classification

**Health hazard: 0**

**Flammability: 0**

**Physical hazards: 0**

### Potential Health Effects

<b>Inhalation</b>	May be harmful if inhaled. May cause respiratory tract irritation.
<b>Skin</b>	May be harmful if absorbed through skin. May cause skin irritation.
<b>Eyes</b>	Cause eye irritation.
<b>Ingestion</b>	May be harmful if swallowed.

### 3. Composition/Information on Ingredients

Synonyms

Silicon dioxide nanoparticles,  
Colloidal silicon dioxide,  
Amorphous silica

No components need to be disclosed according to the applicable regulations.

### 4. First aid Measures

**After inhalation:**

Move the person into fresh air. When necessary, give artificial respiration with oxygen.

**After skin contact:**

Wash skin with soap and plenty of water.

**After ingestion:**

Make victim drink plenty of water.

**After eye contact:**

Rinse out with plenty of water with the eyelid held wide open.

### 5. Fire-fighting measures

**Conditions of flammability**

Not flammable or combustible

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Hazards combustion productions from the substance**

No data available

**Explosion data - sensitivity to mechanical impact**

No data available

**Explosion data - sensitivity to static discharge**

No data available

### 6. Accidental Release Measures

**Personal precautionary measures**

Use personal protective equipment. Avoid dust formation.

**Environmental precautions**

No special environmental precautions required.

**Methods and materials for containment and cleaning up**

Keep in suitable, closed containers for disposal.

## 7. Handling and Storage

### Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.

### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Do not freeze.

## 8. Exposure controls/personal protection

<b>Respiratory protection</b>	Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
<b>Hand protection</b>	Handle with gloves. The selected protective gloves have to satisfy the specification of EU Directive 89/686/EEC and the standard EN 374 derived from it. Wash and dry hands
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
<b>Skin and body protection</b>	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. Physical and chemical properties

<b>Appearance</b> Form Colour	Powder Colourless
<b>Safety data</b> pH Melting/freezing point Boiling point Flash point Ignition temperature Vapour pressure Density Water solubility Relative vapour density Odour Refractive Index Evaporation rate	No data available No data available No data available No data available No data available No data available 1.8~2.2 g/cm <sup>3</sup> No data available No data available No data available No data available No data available No data available

## 10. Stability and reactivity

### **Chemical stability**

Stable under recommended storage conditions

### **Possibility of hazardous reactions**

No data available

### **Conditions to avoid**

No data available

### **Materials to avoid**

Strong oxidizing agents

### **Hazardous decomposition products**

Other decomposition products - No data available

Hazardous decomposition products formed under fire conditions. - No data available

## 11. Toxicological information

**Acute toxicity**

**Oral LD50**

No data available

**Inhalation LC50**

No data available

**Dermal LD50**

No data available

**Other information on acute toxicity**

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitization**

No data available

**Carcinogenicity**

**IARC**

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans

**ACGIH**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**Reproductive toxicity**

No data available

**Teratogenicity**

No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

No data available

**Aspiration hazard**

No data available

**Potential health effects**

**Inhalation**

May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion**

May be harmful if swallowed.

**Skin**

May be harmful if absorbed through skin. May cause skin irritation.

**Eyes**

May cause eye irritation.

**Synergistic effects**

No data available

**Additional Information**

RTECS

Not available

**12. Ecological information:**

**Toxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**PBT and vPvB assessment**

No data available

**Other adverse effects**

No data available

**13. Disposal considerations**

**Product**

Contact a licensed professional waste disposal service to dispose this material.

**Contaminated packaging**

Dispose of as unused product

**14. Transport information**

<b>Road transport:</b>	Not dangerous goods
<b>Sea transport:</b>	Not dangerous goods
<b>Air transport:</b>	Not dangerous goods

**15. Regulatory information**

**WHMIS Classification**

Not Rated

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

## **16. Other information**

Alpha Nanotech Inc. provides the information contained herein in good faith and 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. shall not be held liable for any damage resulting from handling or from contact with the above product.